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AN ESSAY OF TRANSMIGRATION,

In Defence of

PYTHAGORAS:

OR, A

DISCOURSE OF NATURAL PHYLOSOPHY.

Principio Cœlum & Terras, Camposq; liquentes,
Lucentemq; Globum Lunæ, Titaniaq; Astra,
Spiritus intus alit; totamq; infusa per artus
Mens agitat molem, & magno se corpore miscet. Virg.

By Mr. *BULSTRODE.*

LONDON,
Printed by *E. H.* for **Tho. Basset,** at the *George*, near St. *Dunstan's* Church in *Fleet-street*, 1693.

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THE

Epistle Dedicatory.

To Mr. *LEY.*

'TWas you, my Dear Friend, with whom I first enjoyed the Pleasures of Friendship, and 'twas you that first invited me; though not into the Garden of the *Hesperides*, yet into a Field of great Usefulness, and infinite Delight; where, after the

Fatigue and Embarraſment of a troubleſome Employment, like the wearied Traveller, I have often at Night lain down, and refreſhed my tired Spirits. If I have therefore nodded in the following Pamphlet, be you my Witneſs and Excuſe.

But whatever it is, to you, *Dear Sir*, of right it belongs, being that good Friend, that firſt ſhewed me my Faults, and moved me to a Study, which has given me a true Proſpect of the Trifles of Life, and how much more valuable the Unſeen Things are, than thoſe our Senſes daily converſe with. For,

As

As the kind *Heavenly Genius* when we go
Out of that *Path* appointed us below;
Mov'd with great Pity t'our declining State,
Do's ſoftly whiſper, *Turn*; ere 'tis too late:

So my *Leander*, when I went aſtray
From the *unbeaten* Path of Vertues Way,
Swifter than Lightning darting from a Cloud,
Stretch'd forth his hand.——

But I forget I am in publick, and that this is not my Province.

This shew, that the Body is too grosse to enjoy a refin'd Pleasure, and that the Affections of a man given to the Delights of Contemplation and Search, are too lofty to be allur'd down to sensual Enjoyments. *Aquila non capit Muscas.* *Des Cartes* expresses it well: *Voluptas quam percipimus ex intuitu rerum, quas oculi cernunt, minimè æquiparanda est cum illa, quam adfert notitia illarum quas Philosophando invenimus.* 'The Pleasures of Sense, are 'in no sort comparable to 'those, which the Mind en-'joys by Knowledge and 'Philosophy. So that Philosophy and Religion, or the latter alone, have truly the better on't in this Life, as well

as the next. God bids fairer for our Service, than all things else besides.

But to do Justice to both; I must acknowledge the *Sensualist* has Pleasures and Diversions (such as they are) more ready and at hand, than a man of Thought and Retirement. The one had need but look out, and he sees something that is ready to fill up the narrow Faculties of Sense presently, whilst the other must go farther off, and with great industry find out an Object that is noble enough to divert and entertain him. The Pleasures of the one, are like Diamonds, rarely to be found; but of the other,

other, like Pebbles, every where to be had. Yet this Advantage the Learned and the Wiſe, the vertuous Philoſopher, when advanced to ſome Height, has over the other, that he carries his Pleaſures with him, in the Streets, or in the Fields, or even in diſagreeable Company, can find uſeful and pleaſing Thoughts, both to delight and improve his Mind; who not only dares be alone, but finds infinite Pleaſure in the *Contemplation* of the ſeveral parts of the *Univerſe*; to whom, with *Jacob*, the *World* is a *Bethel*; for he can turn the *Darkneſs* of a *Dungeon*, into the *Light* o a *Divine Palace*, and behold *Nature aſcending* and *deſcending*, like

like the *Angels* on the *Ladder*. But not to pretermit any of the excellent Advantages the Dissolute enjoy.

The one, I must confess, more constantly gains his Point, than the other; for what with his sordid Flattery, and Baseness of Spirit towards the Great and Haughty, his Insolence towards the Modest and Humble, and other mean and disingenuous Arts towards all, he obtains what he desires. But did a Beggar gain a Crown by such means, he were not worth my Envy; for when a little Affliction befalls such an one, so loose is his Constitution, by the unsetledness of his Princi-

ples,

ples, (if a constant Byas to Baseness of Spirit may be called unsetled,) he dissolves under the weight of a little misfortune; a few Weeks imprisonment puts an end to his Life: But how does the Vertuous sit smooth and sedate, whilst Lightning invades his Eyes, and Thunder his House? Who though he would dissolve in Tears, for the least voluntary Sin, yet would not shrink to see the World in a general Conflagration; who goes out of this Life with the same Joy a man goes to see his affectionate Friend. Give me the man, who having secur'd the Divine Love by an universal Obedience, carries his own Heaven with

him where-ever he goes; that can see in every Field enough of the Divine Wisdom to fill all the Powers of his Soul with a lasting Joy and Pleasure. Compar'd to these, how mean are the Thoughts of a last Night's Debauch, or the expecting ones of another? How sordid the Contemplation of many Bags, and how empty the Titles of Honour? For my part, I have not Sence enough to distinguish any real difference between a Feather in a Child's Cap, and a Riband cross the Shoulders of a Man. Ah! how foolish is Mankind to neglect the solid Joys of Wisdom and Philosophy, for the Rattles and Trifles of Life!

So that (the next World apart) with great Truth I may affirm, That the moſt voluptuous Man alive, enrich'd with the Fancy of *Ariſtippus*, or a *Lord Rocheſter*, that does indulge his Senſes with all the Art that Wit, Health and Riches can lay together, that has all the Court which the Devil in Nature, is capable of making to him; falls infinitely ſhort of the Pleaſures of a Man, that has a good Underſtanding, well govern'd Affections, and but a moderate Fortune to enable him to enjoy the Pleaſures of Philoſophy, and to exert his Religion in the pleaſing Offices of Charity and Affection.

The

The *Cynicks* and *Stoicks* will charge me with a ſurplus of Ingredients to the conſtitution of Happineſs; but I conceive their Notion of it to be Romantick and Fanciful; but that of the *Peripateticks* and *Epicureans* ſober and wiſe. For *Externals*, in the hands of a wiſe man are good Inſtruments even of Beatitude; and Pleaſure and Pain muſt have ſome difference even in the opinion of a Philoſopher that is converſant in the World. 'Tis a fooliſh thing to make Vertue the Object of a wiſe man's choice, and then ſet it above his reach, at leaſt above his deſires; Vertue (*a*) I mean,

(*a*) Thus high the *Cynicks* and *Stoicks* advanced Vertue, whoſe ſole Reward, which it ſelf brought, they held ſufficient to conquer the Miſeries of Pain and Want.

ſtripp'd

stripp'd of Health and Necessaries, and clogg'd with Pain and Misery, without the Prospect of a future Life. But the *Cynick* indeed had Wit, when being blam'd for giving a Pattern above Human Life, said, he was like the Singing Masters, who sung a Note too high, that their Scholars (who would naturally fall short of their Master) might reach a true Pitch.

I must confess, when I consider the Lives, not only of the *Cynicks*, but others of the *Pagan Philosophers*, and to what a Noble Height they advanced their Minds, meerly by the due exercise of their Understandings;

derſtandings; how meanly and contemptibly they look-ed upon ſenſual Pleaſures, to that degree, that the former trampled upon Riches and Honour as vile things; *Antiſthenes*, the Father of them, ſaying, he had rather be mad, than given to Senſuality; and *Heraclitus* contemn'd his Body, eſteeming it as Droſs, taking care for the Cure only as God ſhould command him, to uſe it as an Inſtrument; and this not as a ſudden Fit or Paſſion, or Declamation of Wit, but as a ſetled Principle rooted in their minds, and exerting its Fruit and Effects in their Lives: I bluſh both for my ſelf, and other Chriſtians, to

think how impetuouſly we purſue the things of this Life, and how coldly thoſe of a better.

It may be enough to make a Chriſtian aſham'd, even in Heaven, to ſee *Hermes*, *Pythagoras*, *Socrates*, *Plato*, and the whole Crowd of vertuous Heathens there, bearing the Honourable Badges of Mortification, and the Noble Scars of Reproach, and Wounds, for Vertue's ſake, as a Sacrifice pleaſing to God; whilſt the Chriſtian, at a diſtance, beholding in himſelf the Marks only of Profeſſing his Religion, where there was no danger in the doing it, and having received much,

gave

gave a little, and lov'd with Sincerity; and yet how few are there reach this Pitch? What Chriſtian is there from the Debauchee to the Profeſſor, that conquers a Luſt, ſubdues a Paſſion, or reſiſts a charming Temptation *Chriſti gratia?* If the Laſcivious grows chaſte, 'tis not becauſe his mind is changed, but his Spirits are weak, and his Blood low: But how did *Socrates*, of fierce and cholerick, become calm and ſedate by Philoſophy? And can *Philoſophy* do more than *Chriſtianity?*

But why do I ſay this to you, my Dear Friend, who know all this, and your own Me-

rits too (or you would want Judgment) and are yet contented in a low Sphere, grateful to the Almighty under a narrow Fortune; whilſt you ſee others, that ſet no Bounds to their Actions, with a mean Underſtanding acquire Riches and Honour. I know it is eaſie for the Rich to ſpeak fine things of a low ſtate; what Phyſick it is to the mind, and how it reduces the Fever in the Soul, to a good Temper. But for a man that is generous in his Nature (which *Plato* tells us, is the beſt kind of Nobility) and who would embelliſh his mind with all the Uſeful Knowledge and Learning that can be had, to be ſtop-

ped

ped in this commendable Ambition, againſt the Career of his Deſires, and to acquieſce, requires the Philoſophy of an humble mind, which is often a ſtranger to the Learned. This is more difficult than to conquer Kingdoms,

Fortior eſt qui ſe——

You are therefore the truly great Hero I have choſe to defend this *Eſſay*, which (tho' it has been disbelieved by all, becauſe not conſidered by the learned, nor underſtood by the Vulgar) you will do, neither by the dazling ſplendor of a bright Star and Garter, nor the claſhing and thundering Noiſe of Swords and Guns,

nor by your ten Thouſands, but by the ſoft Voice of Reaſon and Philoſophy, which is more valuable to the Wiſe and Vertuous.

Adieu, Dear Sir, and may you enjoy a calm and ſerene Mind, flat and languiſhing towards the World, but active and vigorous, and full of Hopes towards Heaven. May the Light of Wiſdom and Knowledge fill you full of all Joy and Ecſtaſie; and as no *Variation* of Fortune, has, or ever ſhall alienate my *Affections* from you; ſo let no Diſappointment abate your Zeal for the Honour of our moſt Munificent Benefactor, (for whom you can never do too

too much,) ſince He always chuſeth beſt for us, and never denies us, but for our greater Good. I am (what Words need not expreſs)

Your Affectionate

Servant,

Whitelocke Bulſtrode.

THE PREFACE TO THE READER.

I *Writ this* Eſſay *for my own Satisfaction and Uſe, and now publiſh it to vindicate the Honour of* Pythagoras, *whom, though I would not, with the Heathen, Deifie for his eminent Works; yet I would defend him from the Calumny of the World,*

World, ſo unjuſtly caſt upon him, as the Author of an erroneous Doctrine. This is a Tribute, all Men that pretend to Letters (to which I do the leaſt) owe him, that has advanced Learning; eſpecially to Pythagoras, *who ſeems to have been a Treaſury of Knowledge, and that Fountain that watered the* Grecian *Empire with all that Learning they afterwards boaſted. Nor were his Morals leſs refin'd, than his Knowledge was eminent, and his Wiſdom was equal to both; ſo that ſhould I give an Account of his Life, how careful he was to ſubdue all ſenſual Paſſions; how temperate in his Diet, Cloaths and Sleep; how indefatigable to improve and adorn his Mind with all the Knowledge that was to be attained; how*

zealous

zealous to promote the Honour of God, and the Good of Man; how careful to reflect on the Errors of the Day; and in short, to advance all Vertue, and depress Vice; 'twould put most of us out of countenance, to be so much outdone by a Heathen. The Vindication therefore of so good and great a Person, I hope, will not be thought impertinent.

But besides that, I propose to manifest this Opinion, not only as Orthodox & Philosophical amongst the Ancients, but as True and Evident in Nature. Though were it only a speculative Notion, and of no Use, as for me, it should have slept in eternal Shades; but in regard it acquaints us, in its full Latitude, with the various Operations

tions of God, the Generation and Diſſolution of all Created Beings, under Heaven, i. e. *the Animal, Vegetable, and Mineral, the Acceſſes and Receſſes of Life it ſelf; it is a Subject not ſo mean as to be deſpiſed, though it may be here but indifferently handled.*

Epicurus, *who has defin'd Happineſs well, places it in the Tranquillity of the Mind, and Indolence of the Body. To attain this, he makes* Phyſicks *as neceſſary as* Ethicks; *for without knowing the Cauſes of Things, Fear and Doubts perplex the Mind, and diſturb that Quiet which is neceſſary to Happineſs.*

I am ſure it is the Duty of all Men, that have Capacity and Opportunity,

portunity, to look into the Works, *as well as* Word *of God. The Heathens had no other Book to read the Majesty, Wisdom and Power of God in; it was* the Heavens *that* declared *to them, as well as the inspired King,* his Glory. *Nor does the Knowledge of God's moral Government of the World, supersede the Consideration of his Natural; the latter being as worthy our Admiration and Praise, as the former is of our Love and Affection.*

'Tis true, God has in nothing so intensely exhibited his Love to Mankind, as in giving his Son; nor can Man receive a greater Honour, than by being the Temple of the Divine Mind. The Consideration of which, may well strike us with

with Aſtoniſhment, the Favour is ſo immenſe, and ought in Juſtice to raiſe our Thoughts above the Dregs of Senſe.

But though a Man, in ſo large a Field as this, may never want Matter to exerciſe his Thoughts upon, and to raiſe his Mind to a noble Height; yet whoever conſiders the Nature of Mankind, will ſoon find, that the Mind of Man is of a very inquiſitive and capacious Nature; that variety of Subjects are more neceſſary for his Mind, than of Food for his Body; that by this he enlarges his Faculties, advances his Thoughts, and comes to diſcern a clearer Light and Knowledge of Things. Nay, the Acts of Religion it ſelf, are often better performed, with more

Vigour

Vigour and Zeal, after ſome Receſs, than when often repeated without ſome Diverſion. And God having created ſuch Variety of Things, wherein dwells ſo great an Excellency, does more than hint to us our Duty to enquire after them.

The Reproof of the Pſalmiſt, They neglect the Works of God.——*That* the Works of the Lord are great, ſought out by all that have pleaſure in them; *That* they are worthy to be praiſed, and had in honour, *and ought* to be had in remembrance, and ſpoke of; *That* the Power and Glory of God might be made known unto Men, *does include a Command to ſearch into them.* Iſaiah, *ſpeaking*

ſpeaking of the Jews, *ſaith*, They regard not the Works of the Lord, neither conſider the Operations of his Hands. Therefore my People are gone into Captivity, becauſe they have no Knowledge. *God preferr'd our Knowledge of him, even under the Law, to Burnt Offerings; and the Reaſon is plain; for unleſs we know ſomewhat of the Nature of the* Eternal, *we can neither pay that Love to his Goodneſs, nor Reverence to his Power, which we owe to both; we can in no ſort ſerve him acceptably, but we ſhall run into the Superſtition of the* Athenians, *who dedicated Altars* Deo ignoto.

For

For my part, I know no difference that distinguisheth Men from Brutes, but Knowledge and Vertue; the first makes us like Angels, *the latter like* God. Be ye holy as I am holy. *But* Vertue without Knowledge, *runs into* Enthusiasm *and* Superstition; *and* Knowledge without Vertue, *gives us the* Tincture of Satan. *Both therefore are to be sought, which may be attained by a little industry; for surely we are not* born to eat, drink *and* sleep, *and gratifie our sensual Appetites, like Beasts, (nay they all perform some beneficial Offices to Men,) nor to snort in the Air, like a Colt; nor to trample on the Earth, like an Ox; nor to walk in the narrow Track of our Employment, like a*

Foot-post; but to contemplate the Divine Operations, and to look up towards God with Gratitude, for making so glorious a World, repleniſh'd with ſuch admirable works for the Uſe and Benefit of Man. If this be not ſo, and that it is ſufficient for a Man, to attain an Excellency in his Employment, though he has a liberal Education; what difference is there between a Littleton *and a* Van Dyke, *both famous in their way?*

I muſt agree with Epicurus, *That Juſtice is the common Tie, without which no Society can ſubſiſt; 'tis that Vertue, which gives to all their due, and takes care that none receive Injury. 'Tis therefore one of the nobleſt Employments; yet if the knowledge thereof,*

of, (for I ſpeak not of its Morals,) be confined to a City or a Country; if it be meerly municipal, when removed from ones Country, 'tis but Pedantry; and therefore no Man has Reaſon to value himſelf much on that account. But the Philoſopher *is* a Citizen of the World, acquainted *with the* Pandects of Nature; *the other* a Citizen *of* England, Venice, *or* Holland, *and confin'd to the Walls thereof.*

The employing our Thoughts, how the Earth is continually ſending forth a Vapour; the Sea, and all its Rivers, giving up their refin'd Parts into the Air, to meet, and allay the ſcorching Influences of the Heavenly Bodies. That ſince the Water of it ſelf is too

groſs a Food for the Lungs, and the Celeſtial Heat too violent and intenſe, to cheriſh and ſupport us; therefore *God ſtretches out the Waters on the Wings of the Wind, and rarefies the ſame; and that it may be exempt from exceſſive Cold, impregnates it with Vital Heat, to become the trueſt Food of Life.*

That the Heavenly Bodies are continually at work for us, by their perpetual motion, emitting a vital Heat, which cloathing it ſelf with an Aerial Veſt, enters into the Chambers of the Deep, and there frames all that Variety, which, coming forth, we call the Works of Nature.

And

And that the Earth may not be too dry, nor the Rivers too empty, by a constant yielding up their Moisture into the Region of the Air, on the absence of the Sun, the Vapour condenses into a fertil Dew, which descending, cherishes the thirsty Plants; and lest this should not be enough, the Clouds become Store-houses of Water. And whereas the inward Parts of the Earth are kept moist and cool by the infinite Channels, through which the Waters pass; so the upper parts are refreshed by a more plentiful Irrigation, which is of more virtue than Fountain-water, having somewhat of the Heavenly Influences. He that beholds the Rays of the Sun against an opake Body, darting obliquely on the Earth its Seminal Virtues,

and conſiders that by the Command of the Eternal, *the Wheel of Providence is continually at work for us, (which brings Life it ſelf, being nothing elſe, as the Learned* Monſieur d'Eſpagnet *ſays, but an* Harmonious Act proceeding from the Union of Matter and Form, conſtituting the perfect Being of every Individual,) *which the Ancients ſometimes repreſented by* Vulcan *in his Shop, making and hammering out curious Works. I ſay, he that conſiders theſe things (which a mean Underſtanding is capable of,) if he has any ſpark of Gratitude, any Senſe of Obligation; nay, if he is not worſe than a Brute, and more ſtupid than a Block, muſt be inflamed with the Love of ſo immenſe a Bounty;*

which

which when he is, he will naturally expreſs it, not only by an entire Obedience to ſo infinite a Goodneſs; not only by an abſtinence from all appearance of Evil; but by chuſing to do what is moſt eminently Good, and moſt highly acceptable to him. Of what Uſe ſuch a Temper of Mind would be, both to the Perſon in particular, and the World in general, I need not declare, ſince Love, (*which* Plato *calls the moſt Ancient of the Gods,*) *is the moſt raviſhing Paſſion, and the moſt delightful Enjoyment: That* Love, *whoſe Centre is infinite Purity, who is continually iſſuing forth ſuch emanations of Light, Joy and Pleaſure on the Mind of Man, that we ſeem but faintly to dart back ſomewhat of that Love to the* moſt

Munificent, *which the Shallowneſs of our Capacities were unable to receive*; for he firſt loved us.

'Tis impertinent here to deſcribe the Beauty of the World, the Glory and Excellency of its Parts, the Harmony and Order, the Uſefulneſs and Benefit thereof to Mankind, ſince Tully *has done it in his* Natura Deorum, *beyond imitation: This Sir* Roger L'Eſtrange *has ingeniouſly Tranſlated, and embelliſhed with Learned Notes.*

The Wiſdom and Order by which the Parts were moved, made the Stoicks *think, even the Parts themſelves endued with an intelligent Mind, and therefore, weakly enough,*

enough, called them Gods, not distinguishing between the Creator and his Works, which Epicurus *hath well confuted. But I am pass'd my Tedder, and must ask Pardon of our Clergy for invading their Province.*

The Sum of all is this; 'Tis the Duty of Mankind to consider the Natural, as well as Moral Government of Divine Providence. This is the Mean to attain the End of our Creation, i. e. *to advance the Glory of God, and exalt and perfect our Minds. If what I have hinted, does sufficiently shew the Necessity of this, the Neglect of it is a Fault too obvious to need an Inference, and the doing it, an Advantage, that will justifie (at least, excuse) the following* Essay. *I have*

I have but this to add, That whatever are the Faults of the following Diſcourſe, I have avoided one, which the Learned generally incur; that is, of being too præliminary: *One muſt dig fifteen Fathom deep before one comes to the* Oar; *thus infolding a little Truth in ſo much Rubbiſh, makes him that has a quick Apprehenſion, and little Leiſure, neglect the former for the ſake of the latter. But this Fault proceeds from a fooliſh, though cuſtomary Fancy, that unleſs a Book has* Folio 500 *at the End of it, it makes no Figure on a Shelf, but is like to dwindle into the contemptible Name of a Pamphlet. Hence the dull and heavy Tranſcribers load Mankind with intolerable Burthens, and Men, like Aſſes, receive that*

Weight,

Weight, which fills their Heads rather with Smoak and Fume, than Light and Truth.

When I consider that the Wisest of Men have delivered their Thoughts of Men and Things, rather in short Apothegms, *than tedious Discourses; and that the Witty* Greeks *brought even Arguments into the narrow compass of a short* Sillogism; *that* Moses *writ the History of the Creation in a short Chapter; and that He who is more than Man, communicated himself, and what was necessary for the Good of Man, in short Parables, that make a deep impression on the Mind; and in pithy Sentences, that may be writ in a Sheet or two of Paper. I am fully of opinion with the Ingenious*

Mr.

Mr. Norris, *That if Angels were to write, we ſhould have fewer Volumes, and that the Brevity of this Diſcourſe is no real Exception to its Truth.*

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THE

LICENSED,

January 2*d.* 169$\frac{1}{2}$.

Ja. Fraſer.

OF Transmigration, &c.

THis Opinion of Transmigration of Souls, which is father'd upon *Pythagoras*, is *mistaken every where*; but very grosly believed in *Pegu*, *Magor*, and other parts of *Asia*: For believing that the Soul doth pass into some other Creature, after its departure from the Humane Body, they abstain from no sort of respect to the most contemptible Creatures,

and ſuperſtitiouſly avoid doing any hurt to that Animal, whoſe Body, they think, contains the Soul of their deceaſed Father. Now, how they could tell, or why they ſhould think, that this, or that Beaſt is thus animated, rather than another, I confeſs is ſtrange; and what is more ſo, it ſeems from the Belief of thoſe in *Bengall*, and other Parts of the *Eaſt-Indies*, (who imagine that the Souls of Good Men paſs into Cows, and ſuch uſeful Creatures; and the Souls of Bad Men into Crows and ſuch hurtful Birds or Beaſts,) that theſe People think it of the Immortal Rational Soul, rather than the Senſitive. For the Faculties

of

of the Rational Soul are exerted naturally in the kind Offices of Beneficence and Humanity; but thoſe of the Senſitive, only in Growth and Senſe. It looks as if Folly begot, and Superſtitious Fancy propagated this Opinion: Though to do Right to *Pythagoras*, who was doubtleſs a great Man, the abſurdity of this Opinion is as far remote from his Sentiments, as the *Manichæan* Hereſie is different from the *Chriſtian Religion*.

But Philoſophy and Religion have both ſuffered alike by Ignorant Expoſitors: For what will not a wild Fancy and little Judgment, center'd in a Man fond of his own Thoughts, produce? What

ſtrange Opinions in Religion? What barbarous Cruelties by Humane Sacrifices to the Heathen Gods, hath the World been filled with? Nor is Philoſophy it ſelf exempt from very odd Conceits. Thus are the beſt Things corrupted.

But to return to our Author, whoſe Opinion aſſerted is, *That the Soul, after its departure from the Body, paſſes into ſome other Animal.* This is as ſtrongly put as any thing ſaid of him (for we have all by Tradition,) will bear. This Opinion I propoſe to defend, and free it from the Abſurdities Men have put upon it, and reſtore it to its native Sence. But let me premiſe here,

here, That I do not intend this Migration of the Rational Soul; but of the Senſitive and Vegetative Spirit; which Terms of Soul and Spirit, being often uſed as *Synonyma's*, have given occaſion, eſpecially to the Ignorant, to miſtake the meaning of *Pythagoras*.

He that conſiders the Frame of this World, the Contexture of Man, and the perpetual Viciſſitude and Change of Things, will eaſily believe, that either God makes new Matter and Form daily, to ſupply the periſhing old; or that Things paſs, and are changed into one another, by a continual Circulation. But we all know that the Eternal

having made the World by his Wisdom and Power, does preserve it now by his Providence and Goodness; so that we must be forc'd to acknowledge, not a new Creation, but a Mutation of Things, that begets this Variety.

Man indeed is endowed with something more than the rest of the Creatures; he hath a Rational Soul, that should sit President in his Body, govern his Passions, and direct his Affections. How little it does so, proceeds from the Vileness of our Wills, rather than the Degeneracy of our Nature: but we would excuse our selves. Besides this, he hath a Vegetative or Sensitive Spirit, which is perfectly distinct

ſtinct from the Rational Soul, as well as Body: It ſeems to be a *Medium* to unite two Extreams, of a Divine Immortal Ray, and Groſs Matter.

I am not diſcourſing now of the Government of the Mind over the Senſitive Part, and what Obedience the one ought to pay the other; nor how they contend for Dominion, like Prerogative and Liberty in a diſturb'd State: But I am laying the Foundation of the Reaſonableneſs of *Pythagoras* his Opinion, which is the *Tranſmigration of Souls*, or Spirits; for theſe Terms are uſed equivocally.

To go to the bottom of this Queſtion, 'tis fit to conſi-

der Nature in her ſeveral Provinces, *Mineral*, *Vegetable*, and *Animal*; for all created Beings on this ſide Heaven, may be placed under one of theſe Heads; nor are the meaneſt of them without a Spirit, or Vital Principle, which is all one; and theſe, like the Senſitive Souls of Animals, evaporate on the Diſſolution or Deſtruction of their Bodies.

To ſay how theſe Spirits leave their Habitations, before I offer how they enter, may be improper; I ſhall ſpeak therefore of this firſt, and then of the other. Nor will it be impertinent, to the Defence of *Pythagoras* his Opinion, ſince *Tranſanimation* of Spirits may refer as well to *Minerals*

nerals and *Vegetables* as *Animals*; in regard they are all animated alike, as to Vegetation. I ſhall begin with *Metals*.

Of the Generation of *Metals*.

The Globe of Earth being placed in the Air, and the Heavenly Bodies (*a*) moving round her, does receive into her Lap the Celeſtial Influences; they give Heat or Life, ſhe, Paſſive Matter (*b*).

How the Spirit enters Matter.

(*a*) Take which of the Three *Hypotheſes* you pleaſe, the *Copernican*, *Ptolomean*, or *Tychonian*, this Poſition anſwers them all.

(*b*) Hence may be underſtood the Οὐρανὸς of *Orpheus*, the Father of the Gods, with *Veſta*, his Wife; and what he and the reſt of the Philoſophers meant by a Generation of Deities proceeding from ſuch Parents.

The Air (the winged Meſſenger of the Gods) big with the Heavenly Fire, penetrates the porous Earth, and there abides. Being there detained, it

it is congealed into a moiſt Vapour, or ſubtil Water; and by the internal *Vulcan* of Nature ſublim'd in the Veſſel of Earth, through the Pores and Chinks thereof, till meeting with compact Matter, that denies it entrance, or through defect of the moving Inſtrument, it falls back into the Neſt from whence it came: By which means it becomes leſs ſubtil, carrying with it ſomewhat of the groſs Matter, through which it paſſed, both in its Aſcenſion and Deſcenſion; it having not yet obtain'd the Gravity of a fix'd Body, but enjoying ſtill the Priviledge of a pure and ſubtil, quick and volatil Nature; it again takes another flight through

Of the Imperfect Metals.

through the dark Chambers of the Earth; paſſing and repaſſing thus frequently thro' theſe places, it becomes the true Laver of Nature, waſhing away the Defilements thereof; which falling down with it, detains it, as in a Priſon; and not being able to free it ſelf from its Bondage, ſuffers the impure parts to be congealed together, with the pure Salt of Nature, its proper Habitation. And thus an imperfect Metal is made, diverſified only by the difference of the heterogeneous Impurities, and the Remiſſion or Intenſion of the Heat of the Place.

Of Perfect Metals.

But Nature, that tends always to Perfection, makes an im-

improvement from the miscarriage of this *Fœtus*; for a new Vapour passing again through these purified Channels, obtains what its Predecessor could not, that is, a pure and refin'd Salt, void of heterogeneous *Fæces*. This uniting with the warm Vapour, and being dissolv'd by it, causes it to lose its Airy vaporous Nature, and become a clammy Substance; from which State (being digested by its own internal Fire, and that of its Matrix, continually repleniſh'd by a Solar Influx) it advances into a soft, but clayie Body, till through length of Time, it becomes decocted into a more or less ripe Metal, according to the more

more or leſs Purity and Heat of the Womb.

How various Metals are in the ſame place.

Thus in the ſame Vein of Earth, Metals of divers ſorts may be found; as *Albertus Magnus* teſtifies in theſe words; *In Naturæ operibus didici proprio viſu, quod ab unâ Origine fuit Vena, & in quadam parte fuit Aurum, & in alia Argentum, & ſic de cæteris; quæ tamen Materia prima fuit una, ſed diverſus fuit locus in calore; ideo diverſitas loci, depurationis, Metalli diverſitatem, ſecundum ſpeciem fuit operata.* In *Engliſh* thus: "I "have ſeen in the Works of "Nature, from the ſame O-"riginal, a Vein of Metal, "one part whereof was Gold, "another Silver, and ſo of "the other Metals: The firſt "Mat-

"Matter of which nevertheless, was one and the same; "but the degree of Heat in several parts of it, was divers; therefore the Diversity of that, caused the difference of the Metallick depuration, according to the "several sorts. But he that doubts this, let him read the Three Tracts of *Eirenæus the Great*, who deserves a Statue of Gold to be erected to him, in all the Colledges of Learning throughout the World.

Of Stones: The precious.

Stones fall under the same Denomination with Metals; the best of which, through their great plenty of Heat and Light, give a Refulgency to the Matter, which is a Concrete

crete of that Vapour, joyn'd to a pure Salt Water, and ſhines even to the *Superficies*; their form being ſo intenſe, that they ſeem even to ſwallow up their Matter: Whilſt the Common, through their groſneſs of Matter, partly occaſioned by the defect of Internal Heat, become dark and opake; their Generation being rather a Mixture of Earth and Water, bak'd in the Furnace of Nature, than the Impregnation of Paſſive Matter, digeſted by a lively Form.

The Common.

As for *Vegetables*, I divide them into Two Sorts; the one, thoſe that grow of themſelves, without any ſowing; as Weeds and wild Plants: the

Vegetables of Two Sorts; what grow of themſelves, and what are ſown.

the other, those that are raised by Art, by sowing the Specifick Seed.

That grow of themselves.

As for the First, The Production of them seems to be thus. The warm Vapour that penetrates the Earth, is sublim'd by the Internal Heat, and passing through large Pores, arrives near the *Superficies*; and carrying with it, or rather meeting there somewhat of the pure Salt, dissolves it into a liquid Substance, which pure Salt gives a *Specification* to the subtil Vapour, and is a sort of a specifick Matrix to that Form, which was before General and Universal; for Salts of divers sorts do abound in all parts of the Earth.

Thus

Thus variety of Plants may ariſe (as we ſee they do) very near one another, differenc'd by the ſeveral Salts, through which the Vapour paſs'd, and joyn'd it ſelf to them. For if the Air impregnated with Vital Heat, congeal'd into Water, is one and the ſame in all Places, free and undetermin'd, how is it poſſible it ſhould have any Specification, but by ſomewhat it meets with in the Earth, that joyning with it, becomes a Seed, and ſhoots up into a Plant *?

The Cauſe of Variety of Plants.

* This is evident from *Tunbridge*, and other Waters, which paſſing thro' Iron Mines, are impregnated with the virtue of the Mines through which they paſs: Nay, put but a few Iron Nails into a little common water, for half an hour, and it ſhall have the ſame taſte, not to ſay virtue; for the Iron-ſtone is too hard to have much of its Particles waſhed off by the ſoft gliding of Water; and common Water is too weak a *Menſtruum* to diſſolve a Martial Body.

This, I conceive, is the meaning of *Democritus*, and *Galen*, That the first Element of Things is void of Quality, that is, undetermin'd. But why the Salts of the Earth give to some Plants a bitter, to others a sharp Taste; that is, why are the Salts thus differenc'd? I had rather profess my Ignorance, than with *Democritus* and *Galen*, say, They are all one, but only in Opinion.

This Question, how various Plants come to grow of themselves, appear'd to the Great *Du Hamel* so difficult, that, though he starts the Question, he slips from it without a full Answer. His Question is in these Words: *Unde pro-*

prodeant quæ è terra naſcuntur injuſſa gramina? Nunquid forte à cœlo formantur? Sed Cœlum cum ſit omni vitâ privatum, quî poterit vitam & ſenſum largiri? At laſt, after giving many Anſwers; and then confuting them, he comes to this doubtful reſolution; *Influxus Cœleſtes his inferioribus fortaſſe ſe applicant.* But this comes not up to the Point. Who doubts that the Heavenly Influences occaſion the Growth of Plants, and give the formal Eſſence to thoſe that grow of themſelves? But why the ſame Univerſal Influence produceth different Plants, which is the great Queſtion, in that he is ſilent. This Matter having not yet been ſpoke to, at leaſt as I

have met with, and in regard the ſearching Nature to her Original and firſt Cauſe, is more excellent, than to ſolve *Phænomena's* by their Effects, I ſhall ſay ſomething to it in its Place.

Of their Figure.

But to return from whence I have digreſs'd; taking things now as we find them, can it be a wonder that all Plants of the ſame ſort, have much the ſame Figure and Colour? 'Tis not certainly from their manner of preſſing through the Earth, that they obtain the ſame likeneſs; for how ſhould it happen, that the *Species* of every Herb ſhould have ſuch a particular manner of preſſing through the Earth, as to make it always retain the ſame ſhape? But

But I rather conceive that the ſaline Particles that joyn with the Vapour, being ſo and ſo modified, (for they muſt have ſome Figure,) do determine the general Moiſture, as well to a conſtant uniform Figure and Colour, as to a particular internal Nature and Quality. Not unlike the very minute Seeds that we ſee, whoſe Taſte does more truly demonſtrate the Nature of its Plant it produces, than the Microſcope can find out its Figure, and yet its Figure is owing to the Modification of the Seed.

This difference of Qualities *Epicurus* imputes to the various tranſpoſition of Atoms.

Thus Minerals and Vegetables ſeem to be made, not by Creation, as at firſt, out of nothing, but by the Uni-

on of Matter and Form, bleſſed from the beginning by the Word of God, *Creſcite & multiplicamini.* This for the firſt ſort of Natural Productions.

Of the ſowing of Seeds

As for the latter (*i. e.*) the ſowing of Seeds, and planting of Trees, (which came in with the Curſe,) their Production may juſtly be called Artificial; but neither are they produced without the aſſiſtance of the Univerſal Spirit; for being ſown in the Earth, the moiſt Vapour (wherein the Univerſal Spirit reſts,) diſſolves the Body of the Seed, whoſe vital Principle being let looſe, becomes active and vigorous, and meeting with the

the Vapour of the Earth, (like dear Friends) embrace and unite; and being of an homogeneous Nature, grow up together, the General Moiſture being firſt determin'd by the Particular.

The Growth of Plants is the ſame, the porous Roots ſucking in the moiſt Vapour, which is aſſimilated into the Nature of the Tree, by its ſpecificated Virtue. Of Plants.

As for the Generation of Animals, they are not unlike the Production of Vegetables, rais'd by particular Seed. The deſcribing of which, may offend a chaſte Ear, or excite a laſcivious Mind; therefore I omit it. Of the Generation of Animals.

But this Opinion, it's plain, the Learned Ancients were of, when they declar'd, That Man was not propagated by Coition only; but that the Univerſal Spirit, which flows principally from the Sun, has a hand in it. And therefore they affirmed, That *Sol & Homo generant Hominem*; which I ſhall explain more particularly hereafter.

For as Man is not ſupported by Bread and Meat only in his ſenſitive Capacity; but by a ſecret Food of Life, that is in the Air: ſo neither is he generated by the Union of Two Sperms only, without the aſſiſtance of that ſecret Spirit, that enters the cloſeſt Caverns; whence 'tis ſaid, *Non datur Vacuum.* It

It being now ſaid how the Spirit enters, and vivifies Matter, it remains, that we give an account how it leaves it again, and what then becomes of it.

How the Form leaves Matter in Animals.

There are various ways of diſſolving Nature in all the Parts of her Dominion. Animals are deſtroy'd either by the Conſumption (through the length of Time) of their Radical Moiſture, (the Oil that maintains the Flame,) or by accident, or violence; when the Senſitive Spirit (for we ſpeak not of the Rational) leaves its Habitation, and returns into the common Receptacle of Senſitive and Vegetative Spirits, *the Air*, from whence it came.

Minerals

How in Minerals and Vegetables.

Minerals and Vegetables are deſtroyed by Fire, and evaporate likewiſe into the Air, (I mean the volatil.) Here it was we found them at firſt, and here, in a little circulation of Time, we may perceive them again. Now being let looſe from that Priſon, where the Spirits or Forms were detained and ſpecificated, a little Time reſtores them to their native Simplicity and Univerſality; and flowing in an Ocean, where the Celeſtial Influences are continually deſcending, and Vapours aſcending (like the Angels on *Jacob*'s Ladder,) they receive new impreſſes of Virtue, to fit them for farther Service.

What then becomes of the Form, that it paſſes into the Air, where it receives new virtue.

Thus

Thus Nature is never idle, and thus with *Plato*, all things are in a continual Alteration and Fluctuation: Nothing, according to *Pythagoras*, is ſimply new; nor any thing, according to *Triſmegiſtus*, dies; but all things paſs, and are changed into ſomething elſe. "For all mix'd Bodies are "made of the Elements, into "which, after a little time, "they are reſolved again. Thus *Porphyry* tells us, "that "every Irrational Power is "reſolved into the Life of "the *Whole*.

Mundus nunquam eſt, moritur ſemper & naſcitur; id tantum habet conſtantia, quod divina Providentia ab eo nunquam recedit.

And thus theſe Spirits being ready and fit to impregnate

That thence it flows down again, and animates a new Body, which is the true Notion of Tranſmigration.

nate new Matter, and She as apt to desire it, according to the Axiom of *Materia appetit Formam, ut Fœmina Virum*; the same Spirit which animated one Body, may, on its Dissolution, animate another; which I take to be the meaning of *Pythagoras* his Transmigration of Souls, or Spirits. Hence *Lucretius*,

Huic accedit uti quicque in sua Corpora rursum
Dissolvit Natura; neque ad nihilum interimit Res.

"Nature the Form from Bo-
"d ies oft unties,
"New Bodies to inform,
"whence nothing dies.

If

If this be not ſo, I would fain know, what becomes of the Form that animates Minerals, Vegetables, and Animals, not to ſpeak of their Bodies, which are only changed, not annihilated. Can that Spirit that gives Life and Motion, that partakes of the Nature of Light, be reduced to nothing? Can that Senſitive Spirit in Brutes, that exerciſes Memory, one of the Rational Faculties, die, and become nothing?

If Bodies are not annihilated, much leſs are Forms.

If you ſay, they breath their Spirits into the Air, and there vaniſh, that is all I contend for. The Air indeed is the proper place to receive them, being according to *Laertius*, full of Souls; and according

cording to *Epicurus*, full of Atoms, or intelligible Bodies unapparent, the Principle of all Things. For even this Place wherein we walk, and Birds flie, though it is properly rather Water rarefied, than Air, (as I have proved by a Magnet attracting it,) yet it is thus much of a spiritual Nature, that it is invisible; therefore well may be the Receiver of Forms, since the Forms of all Bodies are so: we can only hear and see its Effects; the Air it self is too fine, and above the Capacity of the Eye. What then is the *Æther*, that is in the Region above? And what are the Influences or Forms that descend from thence?

The

The *Pythagoreans* held, that the Souls of Creatures are a portion of *Æther*; and all Philoſophers agree, that *Æther* is incorruptible; and what is ſo, is ſo far from being annihilated, when it gets rid of the Body, that it lays a good claim to Immortality.

Treaſures fallen into the Sea, are loſt only to them that cannot find them, witneſs our late Expedition. The Spirit is not loſt, but moving in the Air, in its natural Sphere, where it obtains new Strength and Vigor. It paſſes into the Air, as the Rivers flow into the Sea.

Omnia

Omnia mutantur, nihil interit; errat & illinc,
Huc venit; hinc, illuc, & quoslibet occupat Artus
Spiritus, &c. Ovid. *Metam. Lib.* xv.

"The Spirit never dies, but "here and there,
"Though all things change, "it wanders through the "Air.

Objection. That Animals convey a Sensitive Spirit in Generation.

But do not Animals convey a Sensitive Spirit as well as Body, in Generation? How then descends a Form?

Answered. Though they do convey a portion of Specifick Spirit, yet the Universal co-operates.

I agree, they give a Portion of Specifick Spirit; yet this hinders not, but that as the Body is supported by Food, in which there is a portion of Spirit, and as the Animal Spirits, that are continually flowing

ing forth, are ſupplied by the Influx of new, and aſſiſted by the Univerſal: ſo in the Buſineſs of Generation, as well as afterwards, the Specifick Spirit is enlarged and multiplied by the Influx of the General, or Univerſal. Now this is more or leſs according to the activity of the Specifick Spirit; which being of the nature of Light, doth attract its like with more or leſs vigor; not much unlike an enkindled, though not flaming Lamp, whoſe Smoak or Effluviums, reaching a neighbouring Light, attracts it, and becomes enlightned by it at a diſtance; and by how much the Effluviums are more powerful, they attract

The manner how the Univerſal Spirit joyns with the Specifick, in the Generation of Animals.

tract a greater Proportion of Light: For Light naturally joyns and unites with Light, as Fire with Fire; and the Souls of Animals (the Rational excepted,) are a Ray of Heavenly Light.

Hence it comes to pass, that, in Men, Horses, and other Animals, you shall have a vast difference; the Race of some, appearing always full of Life, and, as it were, all Spirit, whilst that of others, are always heavy and dull, and as it were, half animated. And thus it is in several Plants, which every Gardener knows by experience; for you shall have, in the same kind, some produce great increase, and others very

ry little, in the ſame Soil. Now I ſee no Reaſon, why the Univerſal Spirit may not joyn with the Specifick in Generation, as well as afterwards. And why not in that of Animals, as well as in the Production of Vegetables? For though it is in the moiſt Vapour latent in the Earth, as I hinted before, and imbibed more or leſs plentifully, according to the activity of the Form; ſo is it more intenſely in the Air, in its proper Sphere; for the Univerſal Spirit lodging principally there, permeates through all the Parts of the Univerſe, and is that Nature that is always ready, and at hand, to vivifie diſpoſed Matter.

That the Univerſal Spirit is more plentifully in the Air, than elſewhere.

That the Animal Spirit increases in Animals.

That the Universal Spirit does multiply the animal one, after the Birth, is obvious to the Understanding of all Men; for that portion of animal Spirit that animates an Infant, would scarce give motion to a Manly Bulk. But I think we may with as much reason deny the Growth and Increase of the Body, as that of the Spirit. All Men that know the Benefit of good air, and the Mischief of bad, must acknowledge it. How do the weak and languishing in a good air recover Strength, and obtain new Spirit and Vigour? And how languid and sickly do Men become in a bad?

And this may well be; for the Animal Spirits are of an Aereal Principle; which appears from hence; whilſt they inhabit the Body, thro' the intimate Union with the Air, the Body is preſerved ſweet; the Air continually flowing in, adding new ſtores of Life, and giving Motion, as it were, to the whole Machine: But when the animal Spirit is departed, then for want of that Communion, the Body putrefies and ſtinks. Hence *Anaximenes* makes Spirit and Air *Synonyma's*.

The Reaſon of bad Air is occaſioned by the groſsneſs of the Watery Humors, or Sulphurous Vapors that annoy the Celeſtial Influences, by

The Miſchief of Sulphurous Vapors fluctuating in the Air; that they cauſe the Plague.

adhesion to them. When the Arsenical Vapors are multiplied, it begets a Plague; and it's more or less mortal, as they increase or decrease. Dismal was the Place that *Virgil* speaks of;

Quam super haud ullæ poterant impunè volantes
Tendere iter pennis; talis sese Halitus atris
Faucibus effundens, supera ad convexa ferebat.
Unde locum Graii *dixerunt nomine* Avernum.

'O'er which no Fowl can
'stretch her labouring wings
'Such are the Fumes arising
'from those Springs,

'They

'They mortal are, and fill
'the Atmos-Hall;
'Whence do the *Greeks* that
'Place *Avernus* call.

Theſe Sulphurous Exhalations deſtroy Plants and Fruit, as well as Animals; Plants being blighted, and Apples being ſpotted, even with blue ſpots to the Core, in the late Sickneſs-Year, where the Plague raged. The knowledge of which, by the inſpection of the Entrails of Animals, may be had and foreſeen, and by removal prevented. For when the impurity of the air cannot be diſcerned by the Senſe of Smelling, and when the Maligniſty makes no impreſſion on

A Means to foreſee a Plague.

the outward Skin, at leaſt in its firſt approaches; yet the vital parts of Animals, which hold the cloſeſt and moſt intimate Communion with the Air, will preſently diſcover, if there be an Infection in it, by the diſcolouring and putrefying the Parts; for they are firſt tainted, then the Blood, thence the Sore.

The Foreſight of a Dearth.

Hence, I conceive it was, that *Democritus*, when he was reproached for his Poverty, told his Deſpiſers, That he could be rich when he pleaſed: For by this Obſervation, being a great Diſſector of Bodies, he foreſaw a Dearth, and therefore bought up all the Olives. The Dearth happening,

pening, the Price of Olives roſe; whereby he might have ſold them to great advantage; but the Seller repining at his Misfortune, *Democritus*, like himſelf, return'd the Olives at the Price he bought them.

Democritus therefore commended the Wiſdom of the Ancients, for inſtituting an inſpection into the Entrails of Sacrificed Beaſts; from the general Conſtitution and Colour whereof, may be perceived Signs of Health, or Peſtilence, and ſometimes what Dearth or Plenty will follow. *Augury* thus ſtinted by wiſe Obſervation, and having regard to due Circumſtances, may be uſeful; but the Of Augury.

the Practice of it amongſt the *Romans*, as in foretelling particular Events to Men, and the like, was juſtly enough derided by *Cicero*.

The Loſs of Arts.

But all Arts have ſuffered by the additions of fooliſh Impoſtors; whence the unwary reject the Truth, for the ſake of Error intermixt. Hence Arts and Sciences have their Death, as well as Birth. Hence the Tinging of Glaſs is loſt; Yet I conceive, that they who have Leiſure, and Knowledge in the Mineral Province, may extract a Sulphur from Metals, that will tinge and penetrate harder Bodies, than that of Glaſs. But to return to the Subject of

of Air, whence I digreſſed.

The good Air, and the Life and Spirit it brings, proceeds from the ſublimation of a light Water, acuated with a volatil Nitre, which being rarefi'd and impregnated with the Heavenly Influences, conveys down Life, new Recruits to the Spirits of *Animals*, as well as to *Plants* and *Minerals*. The Benefit of good Air.

" This, if you can receive " it, is *Homer's Juno*, whom " *Jupiter* let down into the " Air, with a weight at her " Feet, her Hands being tied " with a Gold Chain to *Jupi-* " *ter's* Chair. *Homer* explained.

The Meaning whereof, is this, That the Spiritual Influences

ences flowing from the Heavenly Bodies, are too ſubtil for a Deſcent, without a Body; that the Air is the Body or *Medium*, that conveys them down to the Earth. And though theſe Forms flow thus continually from the *Æther*, yet the Eternal God has the ordering and diſpoſing thereof, and that it is not done without his Providence and Direction.

Thus, according to *Socrates* and *Plato*, there are Three Principles of Things; *God*, *Idæa*, and *Matter*: *God*, the Efficient Cauſe; *Idæa* and *Matter*, the Formal and Material.

I have

I have now deſcribed Nature in General, the Commerce between Heaven and Earth, and the mutual aſſiſtance they give each other. The Waters giving forth a ſubtil Vapour, to dilute the ſcorching Influences, and the Heavens endowing it with a Vital Principle, ſending it back into its Native Country, enrich'd with the Priviledge of Life. The incomparable *Encheiridion Phyſicæ reſtitutæ*, ſpeaking of theſe Things, has thus ingeniouſly expreſs'd them. *Hæc eſt Naturæ Univerſæ Scala, Jacobo Patriarchæ in Viſione revelata; illæ ſunt* Mercurii *Pennæ, quarum ope, Ipſe (Deorum Nuncius, antiquis myſticè dictus) Superûm, Infe-*

Superior, govern inferior Natures.

Inferorumque Limina frequenter adire credebatur: i. e. "This is "the Scale of Nature in ge- "neral, presented to the Pa- "triarch *Jacob* in a Vision. "These are the Wings of "*Mercury*, (mystically stiled "by the Ancients, the Mes- "senger of the Gods,) by "whose help, he was believ- "ed frequently to visit the "Courts of Heaven and "Earth.

The Seven Planets called Gods; and why, in a large, not a strict sence.

Thus do Superior govern and influence Inferior Natures; the former of which, that is, the seven Planets, for their Excellency and Beneficence to this lower World, the ancient Philosophers called θεοὶ, which we render *Gods*; from ἀεὶ θέειν, their *perpetual*

petual Motion. So the *Eternal*, by his Providence vouchſafing to be always at work, they thought θεὸς a fitting Name for the *Almighty*. Not that God has properly any Name; (though *Kircherus* gives us Seventy two, all in different Languages,) yet we may invoke the Divine Majeſty, by any of his Attributes.

So that the Philoſophers themſelves, (I mean thoſe who were worthy of that Title,) neither believed nor adored a Multitude of Gods, nor intended them for Worſhip; but *propter excellentiam*, called both Things and Perſons ſo. Thus *Homer* calls *Sleep* a God, when it hinders *Jupiter*

The ancient Philoſophers did not adore all they called Gods.

Jupiter from assisting the *Trojans*; and *Hesiod*, in his *Theogonia*, has infinite Deities. Whatever is productive of something else with him, is a God; thus *Contention* is a fruitful Deity, because it produces Trouble, Grief, Quarrels, Fightings, *&c.* So the Name θεὸς, might be given by the *Greeks* to some of their Hero's and great Persons, as to *Antiochus*, who was called θεὸς, without adoring them; as the Title *Majesty* is now given to *Kings*; which being great in the abstract, is not an Attribute too low, even for the *Almighty*; and yet we do not adore them, when we call them so.

Thus

Thus God himſelf is pleaſed in Holy Writ to call Great Men *Gods*; and thus the Appellative, *Good*, (whence the Name *God* is derived,) is applied by us to all excellent Things, as well as Perſons. For *Ariſtotle* could prove, by an Argument from Motion, the Being of one Infinite God, by ſhewing that there muſt be a firſt Mover, who is the Cauſe and Origin of all Motion, who is Immoveable, One, Eternal, and Indiviſible: Which ſeveral Attributes he has proved by irrefragable Arguments. But this Subject merits a particular Diſcourſe.

Ariſtotle proves from Motion, that there can be but one God.

How the Philosophers came to call many Things Gods.

I shall only therefore add here, That Philosophy coming originally from the Poets, they treated of Things in a sublime and lofty Stile; with whom every *Hill* was *Olympus*, and this *Olympus*, *Heaven*; every *Valley*, *Erebus*; and every *Prince*, a *God*. And when they treated of Nature, they represented her as the most Beautiful *Diana*, no less than a Goddess, whom to behold with unclean eyes, was Death; and to unveil whom indecently, to suffer the Punishment of *Tantalus*. The admirable Things spoke of her, (which the People always mistake,) made *Asia* fond to adore her.

The

The Philoſophers therefore, when they ſpoke of the Firſt Principles of Nature, or of her excellent Operations, could call them no leſs than Gods, after the Laws of Poeſie. And this, I obſerve, was an univerſal Cuſtom in all Countries, the Names only differing, according to the Language of the Country; but the Thing was ſtill the ſame. Hence are the Deities of *Homer*'s *Oceanus* and *Tethys*, *Orpheus* his *Ouranos* and *Veſta*, the *Romans Cœlus* and *Terra*, the Father and Mother of the Gods, (*i. e.*) the Formal and Material Principle of all Things. And for the Operations of Nature, they tell us

of *Rhea*, whence *Neptune*, *Pluto*, and even *Jove* himself was descended. For the universal Spirit falling on the Water, they cal'd *Neptune*, (*à nando*, says *Cicero*,) penetrating the Earth, where Treasures are found, *Pluto*, from πλοῦτος, Riches; and whilst floating in the soft Air, *Juno*, *à Juvando*; for all things live by Air; and because it included a Fiery Spirit, which digesting apt Matter, became Metal, the *Metallick Nature*: and by *Jove*, (if you take it not as an *Hyperbole*, which here is not *Jupiter ter Opt. Max.* not a Person, but Place,) is meant the *Empyræum*; for that being neat to the Throne of the Divine Majesty, was by a *Metonymy*,

not

not unfitly called by his name, who ſits there. To imagine theſe, Perſons, according to the Letter of the Poets, is beneath the Thought of a Man of Sence; to confute it, were to write to the Crowd: 'tis not worth lifting up ones Pen againſt it.

Theſe are all ſaid to flow from *Rhea*, meaning the *Chaos* of *Heſiod*, and that dark Abyſs, the holy *Geneſis* calls *void and without form*; becauſe of this Matter all things were made, which were afterwards divided and diſtinguiſhed by an informing, (*a*) created Spirit of Light, raiſing the moſt ſubtil part into the higheſt Region, whither corruptible Matter cannot aſcend.

(*a*) I ſay *Created*, becauſe this Spirit of Light was on the 4th Day contracted into the Body of the Sun.

This Region the Philosophers call'd *Empyræum*, *Jove*, or the Super-celestial Heaven. And as a further Description of Nature's operations, they tell us the Story of *Thetys* her going to *Vulcan*'s House of shining Brass, his falling into her Lap, when he was thrown down from Heaven, her mounting the Sky in a dark Dress, to visit *Jupiter*, who receiv'd her kindly, and placed her near himself. Hence is the *Adad* and *Atargates* of the *Assyrians*; the first representing the Sun, with his Beams bending downwards, the latter the Earth, ready to receive them.

The Description of Nature in her Ascent and Descent.

Then

Then again for their Principles, this is *the Mind* and *Water* of *Anaxagoras* and *Thales*; *the Soul of the World*, that animated all the Parts thereof, mentioned by *Zoroaſter*, *Pythagoras*, *Heraclitus*, *Plato*, and *Zeno*. The *Veſta* and *Jove* (related by *Herodotus*,) of the *Scythians*; the *Ur*, *i. e.* Light or Fire of the *Chaldeans*, and Water of the *Perſians*, (which the common People, through Miſtake, worſhipp'd) the Fire and Water of *Hippocrates*, which could do all things, the *Aetes* of *Heſiod*, that married the Daughter of *Oceanus*; that *Fire*, which ſome made ſynonymous with *Sol*; the *Air*, which they called *Venus*, the Virgin, (be-

cauſe not ſpecificated;) and in a word, that Myſtery, which the Ancients, with great Induſtry and Art endeavour'd to conceal from the Vulgar, calling it by divers Names, ſhadowing it in *Hieroglyphicks*, *Ænigma's*, and *dark Fables*, to the end it might not become common; but yet ſo, that the Induſtrious might by labour and ſearch attain the knowledge of it.

For as *Eſdras* had his *Books of Wiſdom*, which the Wiſe only were to look into; ſo had the *Magi* their *Occult Philoſophy*, which they delivered down to their Sons of Learning, either *Cabaliſtically*, or in a Stile the Common People did

did not underſtand. Thus *Pythagoras* and *Ariſtotle* had their ſecret Philoſophy, which they taught only to ſome particular Perſons, whoſe Wit and Morals they were well aſſur'd of. And though *Ariſtotle* publiſhed his *Acroaticks*, yet it was in ſuch a ſtile, that he tells *Alexander*, that none but thoſe who heard them diſcourſe thereof, could underſtand them; that is, they were expreſs'd in a manner difficult to be underſtood, to keep off the Multitude; yet they getting ſight of the Fables of the Ancients, by the unlawful Publiſhing of them, by ſuch as *Hippaſus*, *Hipparchus*, and *Empedocles*, they became an Offence to them,

(*Scan-*

(*Scandalum acceptum, non datum,*) and thereby fell into Idolatry.

The Original [*of one* (a) *Species,*] whereof, might be, as R. *Maimonides* ſaith, from the Worſhip of the Stars; but ſurely not for the Reaſon he gives, (*i. e.*) from looking up to Heaven, and beholding their Splendor, adore them, as the Miniſters of God. By Stars, he could not mean the *Fixt*; (they might as well

(a) I ſay of one *Species*, for various were the parts of Idolatry; and there were ſeveral Origins from whence they ſprang the Worſhip of the Stars not being the Original of all Idolatry; for moſt Nations adored ſeveral Deities. The *Scythians* adored the *Wind*, as God, being (as they ſay) the Cauſe of Life. The *Chaldeans* adored *Fire*; the *Perſians*, *Water*; the *Romans*, *Earth*, under the Name of *Veſta*; the *Egyptians*, divers *Animals* and *Inſects*; and all Nations had their Deified Heroes.

have

have worſhipped a Flock of Sheep;) nor is their Splendor conſiderable: If *Planets*; how comes *Saturn*, that is a dark & obſcure Planet, ſcarce viſible, that moves ſlowly, to have ſuch glorious Things ſaid of him (above the reſt of the Planets, even of *Sol* himſelf,) whoſe Life was the Golden Age? This could not be from the outward Appearance, which takes with the People. This therefore could be no Argument with them for Adoration; but this was ſpoke of ſomewhat elſe, under the *Homonymium* of *Saturn*, which is highly valuable, underſtood by the *Magi*, (and therefore not adored,) though not by the People, for whom theſe

things

things were never intended, nor yet for the *Stoicks*, who trifled in this Matter.

Of the Mysteries of the Ancients.

The Truth is, the *Metaphors* and *Allegories*, and the exceeding abstruse way the Ancients took of veiling their Knowledge in *Natural Philosophy*, shews, they were calculated only for the most elevated Minds, whose happy Condition gave them leisure and opportunity to advance their Contemplation into the satisfaction of experimental Certainty. Whence these Men knew what the meaning was of *Jupiter*'s expelling *Saturn*, the Union of *Mars* and *Venus*, *Saturn*'s devouring his Children, or χρόνος his Son *Sadidus*,

Atalanta

Atalanta fugiens, &c. That theſe were not ſpoke of Perſons, but Things, and are in no ſort immoral; though ſome Pedants have given a barbarous Account of them; who, having daub'd their Writings with *Greek* and *Hebrew*, would make one nauſeate the Tongues, for the Stuff they deliver.

Jamblichus tells us of the Symbols of *Pythagoras*, that without a right Interpretation, they appear like fooliſh, trivial Fables; but rightly explained, diſcover an admirable Sence, no leſs than the Divine Oracle of *Pythian Apollo*. But theſe were the *Arcana Sapientum*. *Nam quæ Sacerdotes*

cerdotes condita in Arcanis habent, nolunt, ut Veritas ignota sit, ad multos manare; Pœnâ iis adjectâ, qui ea in Vulgus proderent, saith *Diodorus*. That is, "The "Priests were unwilling, that "those Things which they "had concealed, should come "abroad; some Truths were "to be kept secret, and Pe-"nalties inflicted on those, "who would prostitute them "to the Vulgar.

That all the ancient Philosophers that treated mysteriously of Nature, meant the same Thing under divers *Ænigma's*.

Now that the Philosophers of all Nations, that were acquainted with the Mysteries of Nature, meant the same Thing under different Masks, will appear more evident, by explaining an *Egyptian* Symbol, according to the *Chaldean* Astro-

Aſtrology, and *Grecian* Mythology. Though it muſt not be expected from me, whilſt I am building up the Honour of *Pythagoras*, that I ſhould violate his great Law of Secreſie; that I ſhould manifeſt in publick, what is fit only for the communication of an intimate Friend. But I ſhall offer enough to maintain my Aſſertion.

An *Egyptian* Symbol explained. According to the

The *Egyptians*, in their *Symbols*, were wont to paint *Mercury* youthful, with Wings on his Feet, and at his Head, a *Caduceus* in his Hand, twiſted about with two Serpents, the Magical Number of Seven, *&c.*

The

Chaldean Aſtrology. The *Chaldeans*, in their *Aſtrology*, acquaint us, That *Mercury* is of the Nature of that Planet with which it is in conjunction; that with the Malevolent, he is Malevolent; with the Benevolent, he is Benevolent; and that he always follows the Sun.

Grecian Mythology The *Grecians*, in their *Mythology*, tell us, *Mercury* was the Meſſenger of the Gods, was wont to paſs from one to another, and that he was a Thief, *&c.* Now all theſe Three are but ſeveral Modes of expreſſing the ſame Thing; and that according to the Genius and Diſpoſition of each Nation.

The

The *Egyptians* affecting *Painting*, were for communicating their knowledge of Nature, by that of Paint and Figure; as a wiſe and diſcreet way of concealing from the Vulgar, what was not fit, or neceſſary for them to know; but what the Wiſe and Learned by labour and induſtry might attain, without which, they were unworthy of it. Which Practice ſome continue to this day, as I have lately ſeen in *Libro muto Philoſophiæ*, Printed in *France*; and as may be ſeen in the *Emblems* of *Maierus*. *Egyptian.*

The *Chaldeans*, that were great Obſervers of the motion of the Stars, their Diurnal and Annual, their Retrogra- *Chaldean.*

dation, and Progreſſion, and in ſhort, of the whole Oeconomy of the Heavenly Bodies, had herein ſufficient Matter to allegorize all their Knowledge of *Natural Philoſophy*, in the myſterious way of the Motion, Conjunction, Oppoſition, *&c.* of the Planets; as ſome Men now uſe to do their ſecret Deſigns, under the Cant of Trade.

Grecian. The *Grecians*, when this Learning was brought them by *Pythagoras*, and ſome few others that travelled into *Egypt* amongſt the Prieſts; being a witty People, abounding with a Luxuriant Fancy, did not like the dull and ſilent way of Symbols, which they

they called *Hieroglyphicks*; wherefore they were for communicating their Knowledge of theſe things in a Poetick, Romantick manner, diſguiſing the ſame with ſtrange Stories, and fabulous Relations of Gods and Goddeſſes, Men and Women, Heaven and Hell; wherein they ſcarce gave any reſtraint to their Wit, or confinement to the Rules, even of Vertue or Decency; ſuch is the Enthuſiaſm of Poetick Rage. Sometimes they mixed *Morals* with their *Mythology*; at others, neither ſparing Heaven or Hell, Vertue or Vice, to repreſent their Knowledge and Experiments in Natural Philoſophy.

Thus when they would expreſs the intimate Union of two Natural Bodies, becauſe the enjoyment of Marriage confin'd the Fancy, and, as they thought, leſſen'd the deſire, nothing would ſerve their turn, but to heighten the Union, to bring in the Adultery of *Mars* and *Venus*; but yet their being caught by the power of *Vulcan*, and cover'd in an *Iron Net*, was ſufficient to inform the Philoſopher, that there was no more intended by this, than to ſhew how cloſe a Union theſe two Bodies would make by the power of Fire. The *Net* whereof was not caſually mentioned, ſince there are ſome living, who have ſeen

the

the Operation *reticulatim.* Tho' after all, to do right to the Ancients; *Ovid*, and other Poets, that have collected the *Grecian Mythology*, out of their Philoſophers and Poets, have (*Poeticâ Licentiâ*) added Inventions of their own, which are as apparently to be diſtinguiſhed, as the bold ſtrokes of an *Apelles*, from the ſhaking ones of a *Tyro*.

Having ſaid this, I ſhall firſt ſhew what this *Mercury* is: Secondly, His Qualitiess Thirdly, How theſe Three Nations agree in their Deſcriptions of him, all of them meaning the ſame Thing under different Veils.

But before I deſcribe him, it is fit to premiſe this; That the Ancients, who ſtudied *Natural Philoſophy*, found a greater Excellency in the Mineral Province, than in all the Parts of Nature beſides, and therefore applied themſelves thereto, and in their *Mythology*, have diſcovered their Experiments therein.

Mercury deſcribed.

Mercury then is, what the Chymiſts call *Argent vive*, and the People, *Quick-ſilver*; the Wonder of the World, dry, and yet current; fluid, and yet not wetting the hand, an imperfect crude Metal. For his Qualities, he is the moſt volatil of the Seven, (and may well therefore be called the

the Meſſenger of the reſt, who are all Gods,) ſuſceptible of any Form, yet will mix with nothing, but what is of his own Nature.

With the *Egyptians*, he was the ſecond *Dynaſta*, according to *Kircher*, *Aureumq; Deum vocabant*, (*ex eo enim Sol oritur*:) and as a Planet he was ſo too, according to *Voſſius* upon *R. Maimonides*, *in Ægyptiorum Hieroglyphicis, Stellâ Deus exprimebatur*. A Meſſenger of the Gods, with the *Greeks*; a Planet, with the *Chaldeans*; both which call the Planets Gods; and with the *Magi*, who underſtood him, one of the Seven Metals.

Egyptian Explanation.

The *Egyptians*, to denote his crude Nature, paint him young; his volatil, with wings on his Feet and Head; his *Caduceus* that works wonders, with two Serpents seven times twisted about; the mighty Power he obtains, when acuated seven times; that as the *Egyptian* Serpents were wont to destroy, so he then becomes powerful in the Dissolution and natural Destruction of Metals. This is that Serpent that devoured the Companions of *Cadmus*; and who they are, he that now knows not, let him be ignorant still.

Chaldean Explanation.

The *Chaldeans*, to shew his volatil Nature, make him a constant Attendant on the Sun;

Sun; and to ſhew his Mutability, and ſuſception of diverſe Qualities, that he is of the Nature of that Planet, with which he is in Conjunction; Benevolent, with the Benevolent; Malevolent, with the Malevolent: (*i. e.*) joyn'd with a Metal abounding with an Arſenical Sulphur, he aſſumes the Nature of that Metal, with which he is in Conjunction, and ſo becomes Arſenical; which being a poiſonous Subſtance, may well enough be called Malevolent; but joyned with a Metal abounding with a pure Metalline Sulphur, he changes and puts off his Arſenical Qualities before aſſumed, and then becomes impregnated with a true

true Metalline Sulphur, which for its excellency, may well be called Benevolent.

The carrying this to its Height, would give a greater Blow to that vain Art of *Judicial Aſtrology*, than either *Cornelius Agrippa*, or any Author I have yet met with, hath given; and give a rational account, why ſome Planets are called Maſculine, ſome Feminine; ſome Cholerick, ſome Phlegmatick; *Saturn* cold, *Mars* hot, *&c.*

The *Grecian* Explanation.

The *Grecians*, to expreſs his young and volatil Nature, make him a ſwift Meſſenger of the Gods; call him Thief, for ſtealing the Arrows of *Apollo*; whereby they ſhew his

his ſuſceptibility of Qualities; that joyned with *Sol*, acuated with the other Metals, he aſſumes his & their Virtues and Qualities, & ſteals from them their Nature and Eſſence. For *Mercury* is the ſame to Metals, as common Water is to Animals and Plants; and as this imbibes the Nature of the Animal or Plant decocted in it, ſo does that, the Nature of the Metal digeſted with it.

Hence may be eaſily underſtood what *Pythagoras* meant, when he ſays, he received the Gift from *Mercury*, to know the Migration of the Soul, as it paſt from one Body to another. This is that *Proteus* that aſſumes all Forms; but enough of this. I am

I am not insensible, that I have gone against the Current of the Learned *Kircherus*, the profound *Vossius*, and the industrious *Galtrucius*, *Bochartus*, *Natalis Comes*, and the rest of the College of Learning, whose Memories I reverence, whose Works I honour, whose Library-Keeper, I confess my self unworthy; yet no humane Authority ought to weigh more, than the Reasons they give will naturally allow: So that I conceive all these Learned Men have followed one another, in the same Learned Tract of ancient Error, a sufficient Warrant for those who are fond of that old Notion, *Quò antiquiùs, eò verìus*; which *Hypothesis* will not

not always hold good; for who knows not, that there was Darkneſs in this World before Light? That the Angels fell before *Adam* was created? That *Adam* was deceived even in Paradiſe, by the *Great Impoſtor*; and ſince that, the next Man, *Cain*, was both a Murtherer and a Liar? He that conſiders how ſoon Sin entred into the World, and that ever ſince Mankind hath been beſet with Sin, Error and Folly, (of which he has been very fruitful even from the beginning;) that the Devil hath advanced his Kingdom to a great height; that Error is more ancient than *Adam*, will not be eaſily perſuaded to believe, that what

is

is most ancient, is therefore most true, though gilded with a shew of Learning. Were there not erroneous Tenets in Christianity coævous with the Apostles? Who then can say, that the bare antiquity of an Opinion is a good Argument for it's Truth? For my part, I think it not fit to be the sole *Criterion* of Matters of Fact; for we are to judge, not only how ancient the Historian is; but how agreeable the Thing delivered, is to true Reason.

The Fables of the Ancients refer to Things, not Persons.

Now the Great Men I was speaking of, have been exceeding industrious to find out to what Persons the Fables of the Poets do relate; when

when in Truth, they are not Hiſtorical Relations of Perſons, but real and true Experiments in Natural Philoſophy, though veil'd in Fabulous Relations, to conceal them from the Vulgar: One Experiment whereof, will give more Light, than the Talk of all Mankind without it. The Explanation of which, may do great Right, I conceive, to the Ancients, deliver them from Calumny, and give ſome greater Light to the Learned World, than hitherto has been done, and yet ſo, as not to tranſgreſs the great Law of *Pythagoras*, or incur the Puniſhment of *Theopompus* or *Theodeſtes*.

The

The Famous Lord *Verulam* has made this one of the great Pillars in the building up his *Instauratio magna*, wherein that Great Man saw, that the Wisdom of the Ancients was couched in these Mysteries: Of which Opinion I find likewise Sir *Kenelm Digby*. But this was fit for the Learned Pen of the Honourable Mr. *Boyle*, the Ornament of our Nation.

Objection. But to return to *Pythagoras*; Can the Belief of this Doctrine, that teaches, that a Spirit set at Liberty, by the Dissolution of its Body, may afterwards animate another Body, be an Argument for any man's paying a Defe-

rence

rence to that Creature, whom, he fanſies, the Spirit of his Father animates?

He may with as much Reaſon honour that Field, that produced his Father's Food, (being aſſimilated into his Nature,) or adore the Wind, (that continued Life to him,) as this Animal. For the Senſitive Spirit, after its diſſolution from the Body, is no more his Father's, than the Air he expired, was a part of himſelf; it was nothing at firſt, but the Ligature of the Rational Soul and Body, which, when they are diſſolved, as to them, there is an end of the Tie. *Reſponſ.*

Objection. No one sure will think this Opinion does invade the Do-

Respons. ctrine of the Resurrection; since there can be no need of a *Medium*, where there are no *Extreams*. The cloathing of the Blessed Spirits after this Life, will doubtless be with a Robe of Light, because they are always to appear before the Father of Lights. Our Saviour's Transfiguration may give us a glimpse of this; but where Flesh and Blood cannot enter, what need can there be of a Sensitive Spirit?

Of the Identity of Form in all Bodies. But I think this Matter may be carried higher than the Opinion laid down of *Pythagoras*; for this very Particle of Light and Heat, when it is free from its Body of what-

whatever ſort, may penetrate Matter that may concrete into Stone or Metal, produce a Vegetable, or inſinuate into an Animal-Matrix, and co-operate in the Generation of the *Fœtus*; for it is homogeneous with the Vital Heat in all but their Specification. 'Tis true, *Eirenæus the Great*, has ſaid, There is nothing that has a Seminal Virtue applicable to two things. But this is ſpoken of a Seminal Virtue latent in ſome Body, not at Liberty and free, but ſpecificated and determin'd.

That this Spirit is univerſal, I need not go back to the firſt Abyſs and Form, to ſhew the Identity of Matter and Form in General, (which was

afterwards divided and distinguish'd according to the Proportion of Matter and Form,) to prove the Identity of Spirit in all these Three. 'Tis enough here to shew, that Minerals and Plants, (not to mention Animals,) being Physick and Food for Man, are, by application to him, assimilated into his Nature, and that only by the Power of his own Specifick Spirit; which shews them to be of his own Matter and Form, or it could not attract and convert into its own Nature what is repugnant to it (*a*). But that there is an Homogeneity of Spirit in all the Three Provinces of Nature, will appear from hence (if it be true) that

(*a*) Aliment (says *Aristotle*) must be the same potentially, which the Thing augmented, or nourished, is in Act.

that from the Droſs of Metals reduc'd to Aſhes, are generated *Beetles*; from Plants, *Caterpillers*; from Fruit, *Maggots*; and from putrefied Animals, *Bees* and *Flies*; ſo that an Animal Life flows from them all. And out of any *Species* of every one of the Three Kinds, may be drawn a Light burning, and fiery Spirit; which could not be, were they not homogeneous.

The great difference which there ſeems to be between the ſeveral parts of the Creation, makes the People indeed believe them of contrary Natures. Thus the Vulgar can hardly think that Fountain-Water will ever become

Wood, Leaves, Fruit, Bones, Sinews, Blood, and all the Parts of an Animal Body: But a Naturaliſt can eaſily diſcern, that the Water or moiſt Vapour, that diſſolves the Seed, is by the Specifick Spirit of the Seed converted into its own Nature, and ſhoots up into Branches, bearing Leaves and Fruit, whoſe groſſer part encreaſeth the Body of the Tree. And ſo the Water drank by Animals, becomes converted into Nouriſhment, and is communicated into all the Parts of the Body, by which they all grow and are encreaſed to a determinate Time. Thus are all the Parts of the Univerſe related to each other by the common

common Bond of the ſame Univerſal Spirit, which *Parmenides* in his famous *Idea's* calls *That one Idea*, which is the Foundation of all Singulars; out of which, as from a Thread, the whole Web, as it were, of Individuals, is woven.

Now this Univerſal Spirit reſiding in many Particulars, is the Support and Foundation of them all; and is, according to *Zenophanes*, wholly together one; though for diſtinction ſake, and that we may better underſtand one another in Diſcourſe, we divide it into Three Heads, which are called Kinds, and into almoſt infinite *Species*,

which are the Particulars.

Thus we ſee Nature, tho' She is One, Pure and Simple, is yet beneficial to the whole Creation, and continually ſupplies the periſhing Old, by the Gift, as it were, of New. And thus we may ſee, that without God, who is Nature's Governor, we can do nothing even in this world.

"O Eternal Wiſdom! How "excellent are the Divine O- "perations! How manifold "the divine Goodneſs! whoſe "Wiſdom, Power and Love "are no leſs evident in the "Conſervation, than the Cre- "ation of the World! If the "Divine Mind ſhould check

"Na-

"Nature a few moments,
"this delicate Machine would
"be without Spirit, the world
"would be benumb'd with
"an eternal Cold and Dark-
"neſs, and an everlaſting
"Death; all things would run
"back into their firſt Maſs,
"Chaos, and dark Abyſs,
"never to be renewed, with-
"out that Spirit that firſt ba-
"niſhed Darkneſs, by ſepa-
"rating the Waters, and en-
"kindling in their moſt refi-
"ned Parts (advanced to
"the Region above) a Spirit
"of Light.

"To the Eternal therefore
"be infinite Praiſes by the
"pure Spirits of Men and An-
"gels.

He

A comparison of the Form in Animals, Plants and Minerals.

He that thinks I do a dishonour to Animals, in supposing, that that Spirit that animated a mean Vegetable, or a sluggish Metal, on its leaving these Bodies, should give Life and Motion to an Animal Being, will easily see his Mistake, when he considers that those Things are always esteemed most Excellent and Noble that are of longest duration. Now we see, that many Vegetables, and all Things of a Metallick Composition, do exceed Animals in duration of Time. Besides, all Things receive a value from their Usefulness; now, though divers Beasts and Birds are very useful both for Food and Pleasure, yet none of

of them are ſupported without Vegetables; nor can any Man plow, or go to Sea, without Metals. But this is ſpeaking rather like a Merchant than Naturaliſt; therefore I ſhall wave it.

That Spirit ſeems to me to be moſt Noble, that has ſo digeſted the Paſſive Matter, which contains it, as to be able to defend it againſt all the aſſaults of the Elements; and on the other ſide, that Spirit ſeems to be moſt weak and unactive, that ſuffers its Body to be ſooneſt diſſolved on their Intention. Now Vegetables and Animals do both periſh in the Flames; but Metals do not: So that the Strength

Of the Excellency of the Form in Metals.

Strength and Virtue they enjoy visible to every Eye, gives them justly the Precedence. But could their Bodies be dissolved, and their Spirits let loose, as we see in Vegetable Seeds, then their Excellency would be very manifest. He that has seen the perpetual Light to which they have been advanced by Dissolution, does know what place they merit in this Life; wherein were the operation as easie, as the Reason is evident, no ingenious Man would be without it. For my part I own my self herein, only *Un Croyant*; yet he that is not able to draw a Bow, may yet give Aim. Wherefore, to this, I conceive, there is need of an homogeneous

Of the perpetual light made out of them, and of its great difficulty.

neous Agent, defecated from all Impurity, and impregnated with a Metalline Sulphur, the former found in the Houſe of *Gemini*, (*a*) the latter in that of *Aries*, by the benign Influences of *Libra* and *Aquarius*.

(*a*) This is *Jargon* to thoſe only, who do not underſtand it.

But let none but the Happy pretend to this. He that can retire, and enjoy the Freedom of *Horace* his Countryman;

Beatus ille, qui procul negotiis,
Ut priſca gens mortalium,
Paterna rura bobus exercet ſuis,
Solutus omni fœnore, &c.

"Happy the Man from toil-
"ſome cares ſet free,
"Who does regain Man's
"ancient Liberty,

" Ploughing his Ground with
" Oxen of his own,
" By Parents left; 's free
" from Usurious Loan.

To this Freedom of Thought, there is necessary a Knowledge of all Nature, a plentiful Fortune, and above all, a wise and a Learned Friend. *Qui publicis Honoribus & Muneribus funguntur, aut etiam privatis & necessariis Occupationibus jugiter incumbunt, ad summum hujus Philosophiæ Culmen ne contendant: Totum enim Hominem illa desiderat, Inventum possedet, Possessum ab omni serio & longo negotio vendicat, cætera omnia aliena reputans & flocci faciens.* " They who are fa-
" tigued with Publick Ho-
" nours

"nours and Employments,
"or have continual Avocati-
"ons of private & domeſtick
"Affairs, let them not pre-
"tend to the Heights of this
"Philoſophy; for ſhe re-
"quires the whole Mind;
"which obtain'd, ſhe keeps,
"and retains him from all te-
"dious Buſineſs; teaching
"him to ſlight all Things elſe
"as Trifles.

This is an Eternal Bar to ſuch as my ſelf, who am bow'd down to an Employment of daily Attendance, *Me Miſerum!* ——

Well may the Qualifications above be thought neceſſary, ſince beſides the Fineneſs

neſs and Acuteneſs of Mind, there is required *Herculean* Labour.

——*Non viribus ullis*
Vincere, nec duro poteris convel-
(lere ferro.

" This to attain, no Steel has
" any Force,
" Nor *French* Dragoons, nor
" Miſſionary Horſe.

For 'tis ſo difficult, that *Homer* tells us, *Mars* being impriſoned by *Neptune*'s Son, Thirteen Months in a Dungeon, could ſcarce be ſet free by *Juno*'s help, though aſſiſted by *Hermes* himſelf. The meaning whereof, when I have told you, that *Mars* is the

the Son of *Juno*; and ſhe the Metallick Nature, is too obvious to need an Explanation; for a Surcharge is nauſeous to the Mind of an Ingenious Man.

Now to remove all Objections to the Foundation of this Opinion of *Pythagoras*, and what is ſuperadded: It may be asked, How doth it appear that the Heavenly Bodies beſtow an Influence, or Univerſal Spirit on the Earth? Why may not the Earth it ſelf be impregnated *ab initio* with Seed enough, to hold out for all *Species* to the end of the World? Object. 1. Object. 2.

Respons. That the Heavenly Bodies move and transmit Heat, we Both see and feel: Nay, this Heat beyond the Tropicks, is so intense and powerful, that with us collected by a concave Glass, it will melt Silver, and that in a more extraordinary manner than a Culinary Fire is able to perform. Whence *Mechungus* affirms, that there is no artificial Fire able to give such a heat, as that which comes down from Heaven. We see Insects, a sort of Animals, in a few days are generated by it in wateriſh places. Those that pass for Animals, as Frogs, Toads, and even Mice, whose Generation is æquivocal, are so produced; by means whereof,

of, we perceive that Vegetables grow and increaſe.

Timæus the *Locrian*, ſaith, That God ſcatters Souls, (*i.e.*) Forms, ſome in the Moon, others in other Planets and Stars, whence they are inſtilled into Creatures. To which *Ariſtotle* agrees, when he ſaith, That the Univerſal Efficient Cauſe of all things, is the Sun and the other Stars, and that their Acceſs and Receſs, are the Cauſes of Generation and Corruption. If ſo, what need is there of an Element of Fire, above the Region of the Air? But, I conceive, 'twas placed there for Order's ſake only.

Ariſtotle held, that there was an Element of Fire, above the Region of the Air.

Of the Univerſal Spirit.

Now this Virtue that is Miniſterial to ſuch Variety of things, muſt be in its own Nature General and Catholick, or it could not be ſubſervient to ſo many ſeveral different Individuals. The Specification of it, naturally proceeds from the Particulars. We ſee a little Salt ſeaſons a great Lump, and a Scion tranſmutes the whole Juice of the Tree into its own Nature. Wherein we may obſerve a twofold Change: Firſt, Of the general Moiſture into an Identity of that of the Tree: Secondly, A new Specification of it, by its paſſing into the Scion. Nay, ſuch is the virtue of Fermentation, that you may inoculate

late Scion upon Scion, after a little Growth; and whatever becomes of Tranſmutation in the Mineral, we daily ſee it various ways in the Vegetable Province, to that degree, that in many Trees you may ingraft and inoculate out of *ſpecies*, as Cherries on a Laurel, Pears on a Hawthorn-Tree; nor is it otherwiſe in the Animal, of which no man's Experience is without ſome Inſtances.

Fermentation, ſaith the incomparable *Eirenæus the Great, is the Wonder of the World; by it Water becomes Herbs, Trees, Plants, Fruit, Fleſh, Blood, Stones, Minerals, and every Thing.* This *Epicurus* calls

the attracting and intangling adaptable Atoms, by their Fellow-Atoms; by which they grow up into the same Nature; of which hereafter.

Respons. 2. As for the latter part of the Objection, touching the Earth's having Seed enough in it self, and therefore needs not borrow of the Heavens: What I said already to the first part of the Question, may be a sufficient Answer. But to proceed.

That the Earth is barren & sluggish, dead and passive, we may easily see, by considering how unfruitful all places are that are surrounded with Build-

Buildings. For if the Earth had Seed enough in it ſelf, ſhe might be as fertil in a City-Garden, as in a Country. But it is plain, that the want of a free acceſs of the Air, whereby an Univerſal Spirit, or animating Heat is conveyed, is the only Cauſe of Sterility.

Why do your Countrymen, after ſome years plowing, leave the Ground fallow? Is there not Seed or Virtue enough in the Earth to hold out? If there is not, whence does ſhe receive it? It muſt proceed either internally from the Centre, or externally from the Heavens: if from her own Centre, why does ſhe wait the acceſſion of

the Sun, to call forth her Vegetables? And why, where his Influences are interrupted, is she barren?

Object. But may not the Earth have a Feminine Sperm in it, and may not this vital Heat, be as a Masculine Principle, that may only excite, and bring this dormant Seed from Potency into Act, to which Opinion *Xenocrates* seems to

Resp. be inclined? If the Earth were filled with such an imaginary Seed, whenever the Sun approaches with his enlivening Beams, surely all these Seeds would quickly appear to sight; what then should the Earth do for the next year's Vegetables? The Pro-

Propagation of them only by their letting fall a Seed, and by that means another coming in its place, is weak and frivolous; for though this in many places often happens, yet Experience ſhews us, that tho' Weeds are grubb'd up before they run to ſeed, yet the ſame, or others, ſoon grow up in their ſtead; And whence ſhould this happen? Who are the Conſervators of the ſeeds of Weeds, and noxious Plants? Noxious, only becauſe their uſe is not known. What Enemy comes in the night and ſows them? And where are their Store-houſes?

But may not the Birds in the Air let fall ſeed, and ſo it may grow? This Objection Object.

can

Resp. can admit no Resolution but this: Take Earth, defend it as you please, so it has some access of Air, and you will find an Herb of some sort or other arise. "It is "therefore most evident, that "by the Heavenly Bodies, or "from them, a germinating "Virtue is emitted; that this "Virtue is universal, convey-"ed by the *Medium* of Air, "filling all Places, and pro-"ducing divers Effects, ac-"cording to the plenty of "Spirit, and difference of "Place: That this Spirit, on "the dissolution of its Body, "is not annihilated, but gets "loose, becomes active and "vigorous, and impregnates "new Matter, whose Nature

"is

"is varied, according to the "diverſity of Place; as Wa- "ter mixing with ſalt things, "becomes ſaline; and with "Acids, ſharp.

Now, this to me, is ſo far from being a wonder, that I ſhould admire if it were otherwiſe; ſince Bodies, that are but the Caſe of Spirits, are not annihilated, when their Spirits leave them, but loſe only their external Figure and Shape; for if Bodies on their reſolution, were annihilated, the World in time would be reduc'd to nothing.

That Bodies are only changed, not annihilated.

For the World conſiſting of Parts, and thoſe Parts of Bo-

Bodies, as Bodies are annihilated, ſo are the Parts; and the Parts being daily ſubſtracted, this Machine would fall to pieces, or rather to nothing. 'But as in Generation, ſaith '*Epicurus*, there is no new 'ſubſtance made, but pre-ex-'iſtent ſubſtances are made up 'into one, which acquire new 'Qualities; ſo in Corruption, 'no ſubſtance abſolutely ceaſ-'eth to be, but is diſſipated 'into more ſubſtances, which 'remain after the deſtruction 'of the former.

So that though Bodies reſolve into Duſt, yet this Duſt remains ſtill, and being quickned by a Solar Heat, ſhoots forth into ſome Plant; and this

this Plant becoming Food to Man or Beaſt, and Beaſt to Man, is aſſimilated into the Nature of the Eater, and becomes part of himſelf. Hence *Hermes*, and the reſt of the Philoſophers affirm, that nothing properly dies; but all things paſs, and are changed into ſomething elſe (*a*). So that if one would urge it, he might prove this way a *Tranſmigration* of Bodies, as well as Spirits; ſince the Bodies of the Dead become Food to the Living after a little Circulation of Time, paſſing through a few *Mediums*, and that Food becomes part of him that eats it.

(*a*) *In nihilum nil poſſe reverti.*

This

This the *Egyptians* hinted by the *Hieroglyphick* of a Snake painted in a circular form, the Head swallowing up the Tail: Of which, *Claudian.*

——*Serpens*
Perpetuumq; viret squamis, caudamq; reducto
Ore vorat, tacito relegens exordia lapsu.

'*Python* his Scales renews, and
'on the Ground
'With Tail in Mouth he lies,
'in Circle round.

Thus *Pythagoras* might say he was *Euphorbus*, who lived many years before him, because of the Possibility both in respect to the Identity in some

ſome ſort of his Body (for we were once upon our Plates,) and his animation by the ſame ſenſitive Spirit, being of a Temper and Diſpoſition very like him. Thus for ſimilitude of Spirit, *John the Baptiſt* is called *Elias*.

The Moral of Tranſmigration.

But now for *Plato*'s Opinion, and the reſt of the *Pythagoreans*, who held, or rather ſeemed to hold, That by indulging to Senſe, the Souls of Men paſs'd firſt into Women; then, if they continued vicious, into Brutes, *&c.* This Degeneracy, if he had confin'd to the ſame Body, would have had as much Reaſon and Truth of its ſide, as the other hath of Prettineſs and Fancy: For

For Experience shews us, that many Men, by soft and tender Habits, grow weak and effeminate; and by degrees slide into an Indulgence of all Brutal Passions. Now it is more than probable, that there was no more intended by this sort of Expression, than to shew Mankind to what a low Ebb Humane Nature might descend, to what a Brutal Sordidness Man might sink that wallow'd in sensual Pleasures.

And what is the natural Consequence of this? That Men therefore to avoid this Evil, should adorn and cultivate their Minds with useful Knowledge, and exert Life in

in Practical Vertues. This was the Deſign both of Moral and Natural Philoſophy; and this *Æſop*, who flouriſhed about an hundred years before *Plato*, inculcated by his ingenious Fables; amongſt which, had this of *Plato*'s been inſerted, the Moral had been obvious to every Underſtanding.

This is no new Interpretation; for *Timæus* long ago commended the *Ionick Poet*, for making Men religious by ancient Fabulous Stories. 'For, 'ſaid he, as we cure Bodies 'with things unwholſome, 'when the wholeſome agree 'not with them; ſo we re-'ſtrain Souls with Fabulous

'Relations, when they will 'not be led by the True. Let 'them then (continues he) 'since there is a necessity for 'it, talk of these strange Pu-'nishments, as if Souls did 'transmigrate; the Effemi-'nate into the Bodies of Wo-'men, given up to Ignominy; 'of Murtherers, into those of 'Beasts, for Punishment; of 'the Lascivious, into the forms 'of Swine; of the Light and 'Temerarious, into Birds; 'of the Slothful and Idle, Un-'learned and Ignorant, into 'several kinds of Fishes.

Thus we see how *Pythagoras* has been miss-represented, and what was made use of only as the last Remedy to re-

strain

ſtrain Men from Vice; and was, what we call *Argumentum ad Hominem*, is now, for want of Underſtanding in his Cenſurers, return'd upon him with great Reproach.

But did not *Pythagoras* abſtain from Fleſh-Meat, for fear of eating his Parents, according to the groſs Notion of Tranſmigration? Moſt certainly not; for *Jamblicus* in the Life of *Pythagoras*, tells us, That he being the Diſciple of *Thales*, one of the chief Things *Thales* adviſed him, was, to husband his Time well; upon which account, he abſtained from Wine and Fleſh; only eating ſuch things as were light of Digeſtion;

by which means, he procured shortness of Sleep, Wakefulness, Purity of Mind, and constant Health of Body.

Transmigration in Plants and Minerals demonstrable to sense.

But what if Transmigration may be made evident to Sense in Plants and Minerals? That it may be in Plants, every ordinary Chymist knows: For by the extracting the Spirit or Soul of a Vegetable in the form of Oil, and by the cohobation of it on the calcined Salt of a different Plant, they will impregnate that Salt with a new Life and Spirit, and give it new Virtue, Smell and Taste. Thus they draw forth a Spirit from one Plant, and infuse it into the Body of another. And thus *Van Suchten*, and

and the acuter ſort of Chymiſts, tell us may be done with Metals.

But what need we fly to Laborious Art for the proof of this? Does not ſagacious Nature afford Inſtances enough of this ſort in divers Places, witneſs the petrefying Baths at *Buda*, *Glaſhitten* and *Eiſenbach* in *Hungary*, that turn Wood and Iron into Stone; and the Venereal Mine at *Hern-grunat* near *Neuſol*, where, by leaving Iron in the Vitriolate Water for Fourteen Days, it is tranſmuted into excellent Copper, better, and more ductil than the Natural. But enough of this.

I have done with *Pythagoras*, and ſhall touch now on Four Things.

1. I ſhall ſpeak ſomewhat to the duration of Bodies.

2. Examine ſome Principles and Elements generally received.

3. Compare ſome *Ariſtotelian Hypotheſes* with thoſe of *Democritus*.

4. Having already ſhewn, how variety of Plants and Metals are now generated in the Earth, from the Diverſity of Salts, *&c.* I will endeavour to ſhew how the Earth comes

to

to be filled with ſuch variety of Bodies, abounding with different Qualities.

Of the duration of Bodies.

First, As to the Duration of Bodies. Bodies, after the ſenſitive Spirit has left them, and before their reſolution into Duſt, have a ſort of Vegetable Life remaining in them; as appears by the growth of Hair and Nails, that may be perceived in dead Bodies; and a weak Animal one that lurks in the Moiſture; whence in Putrefaction, Worms and divers ſorts of Inſects may be generated, who dying, others of another ſort ariſe.

If therefore Bodies obtain this ſort of Immortality (not to ſpeak of the Reſurrection of the Body in a Philoſophical Diſcourſe,) why ſhould it be denied to the Spirit, which hath a much greater Right to it, by the pure and incorrupt laſting Nature of its Eſſence?

But I ſhall advance the Nature of Bodies to a much more unmixt and pure Immortality: For the Radical Moiſture of Bodies, that lies in the Bones, may juſtly challenge a Right (as things now are) to an eternal duration. For not to mention Bones that are found entire after a Thouſand Years Burial, nor the Bodies of

of *Egyptian Mummies*, preſerv-ed whole for ſeveral Thou-ſand Years; there is in the Bones a Radical Moiſture, that is fix'd and permanent, and is ſo far from giving way, or ſuffering loſs by that Ele-ment that is the Deſtroyer of mix'd Bodies, that it is the Veſſel made uſe of to purge the fix'd Metals in the Fire, and remains unhurt when the volatil Metals fly away; ſo that none of the Elements can deſtroy it, no not the moſt torrid *Vulcan*.

Now for mix'd Bodies; Fire indeed may ſeparate the Parts of a mix'd Body, change the Figure, and ſo alter its Appearance, as to puzzle the

the beſt Mechanick to reduce it to its primitive ſtate; yet this is no Annihilation, but Diviſion. The burning of Wood or any Fuel, is a Deſtruction of it, I confeſs, as to the Proprietor; but not with reſpect to the Univerſe, no more than there is leſs Money in the World by the Profuſeneſs of a Prodigal; as the one doth but change Hands, ſo the other alters only the ſituation of its Parts.

The Watery or Mercurial Part of the Wood paſſeth away in Smoak, the Oily or Sulphurous in Flame, and the Body of Salt reſts in the Aſhes. The Air preſerves the two former, and the Earth retains the

the latter; each part returns to its native Country. What then can deſtroy this Body, except the *Firſt Cauſe*, I am yet to learn: For though Bone-Aſhes, by reaſon of Moiſture, may flow and become Glaſs, the ultimate end and uſe of them; yet ſo glorious a lightſome body as that of Glaſs, is rather an exaltation of its Eſſence, than diminution of its Excellency; nor does it give any termination to its Being, but only a change to its Figure. If Culinary Fire deſtroys the Parts of the Univerſe, in time it may the whole. But this is inconſiſtent with the Wiſdom of its Maker, to create Principles deſtructive of one another.

The

Of the general Conflagration.

The Light of Nature, as well as Experience taught *Plato*, that the World was not deſtroyable by any other Cauſe, but by the ſame God, who compoſed it; which the *Eternal* can eaſily do by Fire, according as Things now appear, without the Light of Holy Writ: Which makes me wonder, that *Ariſtotle*, *Zenophanes*, and other Great Men did not ſee this; but thought the World of neceſſity as Eternal as God; for though the Heat of the Sun is now tolerable between the Tropicks, yet he that conſiders its being a little multiplied by a concave Glaſs, even in our Meridian, (though its Rays paſs through a vaſt Region of Wa-

Water rarefied,) if reflected on a Man for ſome time, it will ſcorch and deſtroy him, when the volatil Waters that allay his Heat, become fixed, (which the People think now are, and a Philoſopher knows may eaſily be,) then the Sun having no Cloud to obſtruct his Light, nor any Water to cool the ſcorching Heat of his Rays, will neceſſarily burn up and calcine the Earth.

Thus the very Elements would deſtroy us, did not the *Eternal*, by his Providence, defend us from the Heat, by the interpoſition of the Waters, and from the Chilneſs of the Waters, by impregnating them with a Solar Heat,

whoſe

whoſe inviſible congealed Spirit, (ſaith one of the Learned *Magi*) *is more valuable than the whole Earth. Clementiſſimo itaq; infinitæ ſint Laudes.*

2. Of Principles and Elements.

Secondly, As to Principles and Elements: being to ſpeak of theſe, it will not be amiſs to enquire, how and when theſe came into the World. The Study of *Natural Philoſophy* was as early in the world, as Men came to call upon God: For whatever Appearances God made to the *Antediluvian Patriarchs*, and by that means communicated his Divine Will and Nature to them, yet we cannot ſuppoſe that the World in general had any other Light of the Divine Glory

Glory and Majesty, than what came to them by Tradition, and the Contemplation of the several Parts of the Universe; for God is known by his Works; they are the Witnesses of his Wisdom, Power, and Goodness. The Knowledge of these Works, comes not to Mankind (at least generally) by Inspiration, but by exerting our Faculties.

And as for Tradition, that is apt to make but a weak impression on thinking Men, unless it is back'd with Reason.

But besides, though the Creation of the World was a Tradition, and the manner out of *Chaos*; yet to give an account

account of the *Phænomena* of Things, and the manner now of Nature's Productions, could not be a Tradition. This was left to Man, as the proper exerciſe of his Rational Powers, that by improving, and advancing his Thoughts, he might come to have a clearer Light and Knowledge of God, and conſequently, love him the more intenſely; for it is almoſt impoſſible to have a true knowledge of God, and not to be inflamed with Love of him, ſuch is the Purity and Perfection of the Divine Nature.

When Men therefore began to contemplate the works of God, they found all the Parts

Parts of Nature reduceable to two Heads or Principles; an Active, Vital or Formal one, and a Paſſive or Material.

This I conceive *Moſes* intended, when he tells us that in the Beginning God created the Heaven and the Earth: which things are expreſſed in the very ſame words by the *Chaldeans*, *Aſſyrians*, and *Greeks*, as I have hinted before.

Thales, who was one of the firſt amongſt the *Grecians*, as, *Laertius*, *Strabo*, *Cicero*, and *Plutarch* affirm, that made enquiry into Natural Cauſes, conceived Water to be the Material Principle of all liv-

ing Creatures; because all Seed is humid, and Plants and Animals are nourish'd by it. This he had from a more ancient Nation, the *Phœnicians*, by whom *Orpheus* was likewise instructed.

To this Material Principle, *Anaxagoras* is said to be the first that added (Nous) the Mind, by which, I conceive, he meant the Formal. Hence *Virgil* calls the Universal Form the Mind.

——*Totamq; infusa per artus*
Mens agitat molem, & magno se corpore miscet.

'A Mind infus'd through this
'World's every part,
'Does

'Does move the whole Ma-
('chine with wondrous Art.

But *Homer* and *Hesiod* both gave an account of these two Principles long before.

Various afterwards were the Opinions of the Philosophers about Principles. *Pherecydes* the *Assyrian*, asserted Earth to be the Principle of all things; *Anaximenes*, Air; *Hippasus*, Fire; *Xenophanes*, Earth and Water; *Parmenides*, Fire and Earth; *Enopides*, Fire and Air; *Democritus* and *Epicurus*, Atoms; *Empedocles*, *Plato* and *Aristotle*, &c. to these Principles added four Elements, being the visible Matter, as they conceived, of which all Bo-

dies did subsist: And this the School-men, following them, have hitherto maintained, and it is now the Doctrine of the World.

Of the 3 Principles of the *Chymists*.

The *Chymists* hold Three Principles at this day; these Principles and Elements I now intend to examine: And first, for the Three Principles.

Principles.

I know it is no less a crime than Heresie, in the Communion of Chymists, to deny any of their three beloved Principles, their *Salt*, *Sulphur*, and *Mercury*; but being not of their Church, I need not fear their Censure. I do admit *Salt* in some sence, to be one of their Principles; but

I do

I do deny *Sulphur* and *Mercury* to be ſeveral; for their beſt Authors affirm *Mercury* to be only crude *Sulphur*, and *Sulphur* ripe *Mercury*; they differ therefore not in *ſpecie*, but in degree of Digeſtion. 'The Ancients (ſaith *Eirenæus the Great*) thought them 'all one; and though *Paracelſus* has invented a Liquor, 'by means whereof, he taught 'the way of ſeparating the 'Sulphur in the form of a 'tincted Metallick Oil; yet I 'conceive this is nothing but 'an extraction of the riper, 'and more digeſted part of 'the *Mercury*.

This will appear more evident, by conſidering the Mat-

ter of Metals; which I will deliver in the sence of *Eirenæus the Great*, having translated him, but not having the Original in *Latin* by me. 'That '*Mercury* (saith he) which is 'generated in the veins of the 'Earth, (and all Metals arise 'from the same Matter) is the 'universal material Mother of 'all things cloathed with a 'Metallick *Species*, which may 'be easily proved, because '*Mercury* is accommodated 'to them all, and by Art 'may be conjoyned; which 'would be impossible unless 'they did partake of the same 'Nature. *Mercury*, saith he, 'is Water, yet such as will 'mix with nothing that is not 'of its own Identity; where-

'as

'as therefore it drinks up all 'Metals by its moisture, it 'follows they have all a Cor-'respondency of Matter with 'it.

'Again, *Mercury*, by the 'help of Art assisting Nature, 'may be successively digested 'with all the Metals. And 'this same *Mercury* retaining 'the same Colour and Form 'of flowing, will assume the 'true Nature of them, and 'by succession exert their true 'Properties; which would be 'impossible to be done by 'Art, did not Nature shew 'us the possibility by their 'Correspondency of Matter. 'Besides, all Metals and Mi-'nerals too, that are of Me-

'tallick Principles, may be 'reduced into a current *Mer-* 'cury.

Hence I conceive, 'tis evident, that current *Mercury* is the nigheſt (though not the firſt) Matter of Metals; which *Mercury* hath a Salt included in it, and becomes a more or leſs ripe Metal, according to the purity or impurity of its Matrix. What need then can there be of Sulphur as a diſtinct Principle? But they that contend that theſe three, *Salt*, *Sulphur*, and *Mercury*, are the conſtituent Principles of a Metallick Body, ought to ſhew that Nature produces theſe three ſimple Subſtances, and then unites them in the com-

compoſition of a Metal. But who ever yet ſaw a Specifick Metalline Salt void of *Mercury* and *Sulphur*? Or ſimple *Mercury* without Salt, or a Metalline Sulphur by it ſelf?

The Truth is, in a ſtrict ſence there are no other Principles, but the moiſt vapor impregnated with vital heat; for theſe two alone conſtitute all Bodies. As for the Salts I mentioned in the generation of Plants and Metals, I conceive them to be only a congelation of a former Vapor, differenced in Metals by a long circulation in the Alembick, of the Earth; and in Plants, by a ſpeedy reſolution near the *Superficies*. Now this Homogeneity

neity of Salts in two ſuch different Bodies, will not appear ſtrange to them who conſider the vaſt Alteration Heat makes on Bodies by time, in different Veſſels: thus common groſs Water, in an open Veſſel, by a gentle heat is ſoon evaporated and rarefied into Air; whilſt Dew, a much purer Subſtance, by the ſame heat, circulated in a cloſe Veſſel by length of time, is condenſed into Earth.

Objection. But are not the Principles of Bodies known by their Reſolution, and may not Metals be reduced into three diſtinct Principles?

If

If the various Figures into which the Fire is able to divide Bodies, muſt be called Principles, *Monſieur L'Emery* aſſigns no leſs than five; but he honeſtly confeſſeth, that this is effected by the alteration the Fire makes on Bodies; not by a natural Analyſis into their firſt Principles. *Reſponſ.*

But does not the *Great Stagyrite* hold three Principles, *Matter*, *Form* and *Privation*? *Objection.*

By Privation, he doth not mean a Principle, in a ſtrict ſence, *i. e.* an Eſſence conſtituting a Body, or part of ſuch; but with reſpect to the previous Matter of each Body, before it is ſpecificated, which *Reſponſ.*

which he calls the *Terminus a quo*; as when determined, the *Terminus ad quem.* But if it muſt be a Principle, let it be of Death, not of Life: For how can that be a Principle of Life, that is a ſeparation of Soul and Body? If inſtead of Privation, he had called it Putrefaction, that might well enough have paſſed for a Principle, or ſomething like it; ſince Putrefaction is the Gate to Life.

I think therefore the Two Principles of the Ancients, *Matter* and *Form*, ſtand firm, notwithſtanding *Ariſtotle* or the *Chymiſts*.

But

But if there are four Elements that conſtitute *Bodies*, according to the general Doctrine, they, I muſt confeſs, will overthrow the Two Principles of Matter & Form, unleſs theſe Principles being firſt, the Elements afterwards are made out of them, as *Plutarch* will have it; and then 'twill be diſputing only about Words. But we'll conſider this. Of the Elements.

Elements ſeem to be but modern in reſpect of the Ancients: *Moſes* ſpeaks only of the *Spirit* and the *Abyſs*; and ſo, for what I perceive, it continued even to the Time of *Thales*, who flouriſhed in the 35th *Olympiad*; Principles and

and Elements, being not then distinguished by him; for which *Plutarch* finds fault with him. The same Author makes *Empedocles* to hold Four Elements, who, 'tis said, was a Disciple of *Pythagoras*, who was contemporary with *Thales*. Here I will suppose Elements to begin; the Reason this; They that held four Elements, perceiving that besides the moist Vapour, and heavenly Influence, or Fire and Water in the modern Language, there were Earth and Air; that Air is the Food, and as it were, the Companion of Fire, and Water of Earth, and that things generated in the Earth, could not but partake of its Nature, as the Fe-

tus

tus in the Womb. That two of theſe were active, and two paſſive; two heavy, and two light; muſt of neceſſity be thoſe Parts of Matter, that conſtitute the Harmony of each Being.

To ſpeak clearly to this Matter, I ſhall take each Element apart, and by that you will ſee, whether theſe four, or two only, are ſelf-ſubſiſting Beings; Pure, Simple, Primitive, and Unmixt, which is the Notion of an Element. I will begin with the Air.

That the Air we walk in, is pure and unmixt, no one will pretend; for the Sulphurous ſtreams, that are ſublimed into

Of the Air.

into the Air, and the abundant Moisture fluctuating in this Region, shew the contrary.

The Truth is, what we call Air, is nothing but Water rarefied, attracted by the Heat of the Sun, or sublim'd by the *Archeus* of the Earth; and this may be made manifest by many several Experiments, as the evaporating of Water into Smoak, (which is a gross Air,) or calcin'd *Tartar* that will attract it, and dissolve it into Water.

Of the Earth.

The Earth can never be said to be pure, simple, or unmix'd; for it is the common Shop of Nature, where-

in

in bodies of all ſorts and qualities do reſide. It is in truth, nothing more than the groſſer parts of the Waters, which condenſing into a body, became the Settlement of the Waters, which God afterwards cauſed to become dry, by the removal of the Waters from it, and the Spirit of Light ſhining on it.

Though it is ſaid, *In the beginning God created the Heaven and the Earth*; yet this is by a Figure ὕστερον πρότερον uſual, as the Learned ſay, amongſt the *Hebrews*; for the *Darkneſs was upon the Face of the Deep*; *and the Spirit moved upon the Face of the Waters.* The *Chaos* therefore, or firſt Matter, was

plainly an *Abyſs of Waters*; and ſo our *Latin* Tranſlators and Commentators render it, *Aquarum Terræ ſupernatantium*, ſay *Junius* and *Tremellius*.

Of Water. Water, I conceive, is in its own Nature, pure, ſimple, and unmix'd, without any quality, though ſuſceptible of all. A Primitive in Nature, a middle Subſtance, whoſe one Extream conſtituted Earth, and its other Air or Heaven. This may well be called a Principle; for ſhe is the firſt Matter of all things, into which all things may be reduced.

Of Fire. Fire, in its Original, is an emanation of a Solar Spirit, its

its Rays darting downwards, impregnate and enkindle Paſſive Matter, into Motion and Vegetation. It is the Life or Spirit of the World, as Water is the Matter. To doubt this a Principle or Element (for I think it no Blunder, under *Plutarch*'s Favour, to make them *Synonyma*'s,) were a mortal Sin in Philoſophy.

Having ſaid this, 'tis eaſie to infer, That Water is the paſſive Principle, and the Solar Influence, the Formal of all created Beings; and that, properly ſpeaking, theſe two are the only Principles, according to the Ancients, and the other two only Derivatives.

But does not the excellent S------s, a Learned *Magus*, tell us, That *the Four Elements by their never ceaſing Motion, caſt forth a Sperm, or ſubtil Portion of Matter, into the Earth, where meeting, and uniting, it is digeſted, and brought to perfection, according to the purity or impurity of the place?* The Authority of this Perſon, and the Reverence and Admiration I have for him, as it makes me conceal his Name, ſo it does almoſt make me bluſh to lift up my Pen againſt him.——*Sed magis Amica Veritas.*

If Four Elements go to the Conſtitution of each Being, theſe Elements muſt be intimately united: Now that cannot

cannot be, unleſs the pureſt part of one Element enter *per minima*, the pureſt part of the other. But Earth cannot enter Water *per minima*, unleſs it be reduced to the Form and Tenuity of Water, and then what need is there of Earth, if Earth muſt be firſt reſolved into Water, ere it can unite with it? Again, Water muſt be rarefied to the dignity of Air, or elſe it cannot unite intimately with Air; if ſo, what need is there of Water, ſince Water muſt become Air before it can aſſiſt in the Conſtitution of a Body?

It to me therefore ſeems moſt plain, that all created *Beings* here below, are a Con-

crete of Water, the pureſt part whereof being rarefied, and impregnated with a celeſtial Heat, (which is all the Element of Fire I know of,) is digeſted into the various works of Nature, diverſified now, according to what Nature has wrought in the Matrix, before the Form enters; for the Form is as capable of divers effects, as the Water is ſuſceptible of qualities. Thus much for the Second, *viz. Principles* and *Elements.*

Thirdly, I ſhall compare ſome *Ariſtotelian Hypotheſes* with thoſe of *Democritus.*

Ariſtotle

Ariſtotle and *Heraclitus* too, held the *Elements* to be contrary to each other; as, *Fire* to *Water*, *Earth* to *Air*, two active and two paſſive Principles; but *Democritus* denies it; alledging, that the Agent and Patient muſt be in ſome meaſure alike, otherwiſe they cannot act upon one another. Wherein *Democritus* is certainly in the right; for Fire and Water differ not in a remiſs, but intenſe degree: witneſs the quiet reſting of Iron (in which the Fire of Nature dwells plentifully) in Water; and witneſs the Generation of Animals in water, which cannot be done without heat, and witneſs the Seeds of all Beings (whoſe germinating

Virtue, is the Fire of Nature) involved in Moiſture.

There is, in truth, no more difference between theſe two, than between Water and Plants; of which, the one is ſo far from being repugnant to the other, that the Plant is nouriſhed by the water; yet when the water is raiſed to an *Acid*, and the Plant reduced to an *Alkali*, by the union of theſe two, a violent ebullition is cauſed, a controverſie even unto Death.

As for the Cauſe of the variety of *Bodies*, the difference between *Ariſtotle* and his Followers, and *Leucippus*, *Democritus* and *Epicurus*, and their

their Followers, is no leſs; and 'tis no wonder that they who differ in the Nature of their Principles, ſhould fall out in the effects they produce.

The *Ariſtotelians* impute the effects of *Bodies* to ſecret primary Qualities, reſiding in them, by the conjunction of the Elements; and ſo under the Mask of Qualities, which they could not tell what to make of, couch all ignorance of *Bodies*, their Cauſes, if not Effects.

Democritus, and his People, impute nothing to Qualities, but all to Figure and Motion, called the *Atomical Phyſiology*. For

For my part, I think neither Opinion right; yet a middle between both may be true. I ſhall conſider both Opinions, and then give my Reaſons againſt both, and for the middle one. As for the *Pyrrhonian* Doctrine of Qualities, 'tis too trifling to merit an Anſwer.

I might introduce this Queſtion with a great deal of pomp, and ſhew that it hath been a Controverſie in the world for above Two Thouſand Years; that it hath exerciſed the greateſt Men, and that it is not yet determined. But I ſhall think my ſelf happy enough, if I can put an end to this Debate, without any

any other conſideration. The Method I propoſe to take, I think, differs from thoſe that have gone before me; for I intend to ſpeak of the Creation of the Firſt Matter, and Univerſal Form, and ſhew how from the various Union of theſe Two, various Qualities ariſe. But it would be too Magiſterial to reject Opinions, without ſhewing their Miſtakes: I ſhall therefore endeavour to ſhew the Error of theſe two Parties, and then ſubſtitute what I conceive more true.

As to the *Ariſtotelian*; that of Occult Qualities, 'tis *Ignotum per Ignotius*; a thing is hot or cold, bitter or ſweet, becauſe

becauſe of ſome Quality in it; and what is that Quality? 'Tis Occult, that is in plain Engliſh, 'tis ſo, becauſe it is ſo.

But the moſt that can be made of this Notion of Qualities, may amount to this, That there is a Form, or Vital Principle latent, or occult in all Bodies, that not only retains and keeps the Parts together (be the *Genus* or *Species* what it will) and ſo diſtributes it ſelf to all the Members, performing the Office of Life, but is the Specifick Formal Cauſe of all thoſe Qualities, with which Bodies abound; be they thoſe of Sweet, Bitter, Sharp, *&c.*

or

or Hot and Cold in their ſeveral degrees. Which Form being a Vital Principle, is inviſible, (and therefore occult,) as *Lucretius* holds.

Ex inſenſilibus ne credas ſenſile gigni,
Nimirum Lapides & Ligna, &c.

'Of things unſeen things viſible are made,
'As Stones, and Wood, and 'all things that do fade.

But this, I conceive, cannot be; for though *Galtruchius* tells us in juſtification of this Doctrine, That there is an actual Modification, and Determination of the Form to the Matter; I would fain know

know what particular Quality can a Form have, that enters paſſive Matter? Where can it receive, before it enters Matter, ſuch a Specification? For notwithſtanding what *Pliny* ſaith of the Planet *Venus*, that ſhe ſcatters a Prolifick Dew, which is but general, and what the Aſtrologers ſay of the particular Influences of each Planet; I deſire to know, who can diſtinguiſh the Influences of *Saturn* from *Jupiter*; *Mars* from *Venus*, and ſo of the reſt, except that of *Sol*? The Sun indeed melts Wax, but hardens Clay; but this diverſity of effect proceeds from the difference of the Object, not of the Agent; for the Agent is always

ways one and the ſame, tho' varied according to the paſſive Matter that receives it.

'Tis not therefore the Form alone that gives, or is the Quality in the Body; for as the Body was ſcatter'd Atoms looſe and inſipid, till its parts being collected, conſtituted, by virtue of the Form, a mixt Body; ſo was its Form ſimple and undetermin'd, till bound down, and tied to the Body.

Now for the *Atomical Phyſiology* of *Leucippus*, *Democritus* and *Epicurus*, which is now called the New, by what Figure I know not. How can meer Matter, which in it ſelf, looſe

loose and scattered, is insipid, *i. e.* in its parts hath no Taste, (*for what Taste have the uncompounded Bodies of Atoms, void of Qualities?*) when put together by the clinging of its Atoms, the emanation of its Particles, (or imagine what other way you please) acquire a particular Taste, or give a particular Odor? *Nil dat quod non habet*, may hold well enough here. That which it had not in its Parts, it can never have in the whole; (I speak of the same undetermin'd Matter; for I know that Bodies of different Natures, when conjoyn'd, obtain Qualities by Fermentation, which neither had a part;) besides if Atoms by their Position and

Figure,

Figure, or by the manner of the flowing forth of their Particles, do give a Taſte and Smell, *&c.* theſe Atoms are ſo very ſmall, that the Body, though ſeparated into many Parts, yet muſt retain notwithſtanding the Figure of the Atoms, the Atoms being too minute to have their Angles and Points cut off by a ſmall diviſion of the Body; and conſequently the Parts of the Body, muſt have the ſame Taſte and Odor, when divided, as before, if the Qualities that are perceived by the Organs of Taſte and Smelling, be wholly owing to Matter, *i. e.* to the figuration of the Atoms.

But this daily Experience evinces the contrary; for Bodies divided, or but a little opened, as Plants and Fruit, *&c.* loſe in a little time both their Taſte and Smell, and yet no one can ſay, that the points or angles of the Atoms were disfigured, or the Emanation of their Particles obſtructed, ſince great Proportions were left untouched.

But *Galtruchius* affirms, 'Matter to be previouſly diſpoſed to ſuch a Form, by a 'Temperament of Qualities. But how can this be? Are not Qualities the Effect of Life in every Body, what needs there then a Form where there is Life before? The Qua-

Qualities therefore of Odor and Taſte cannot proceed from the configuration of the Atoms.

Now if neither the Form gives the Quality of it ſelf; for the Form, as I have ſhewn before, is ſimple, a vital Air undetermin'd; nor the paſſive Matter, though Atomical, as I have ſhewn here; and yet all Bodies have Qualities, they muſt proceed from the Union of both, and not from any diſtinct Cauſe in either. So the Spirit of Nitre and Salt Armoniack apart, have no Qualities or Power to diſſolve, or rather corrode Gold, but united, do it effectually.

4. This brings me to the Fourth and laſt Thing I intend to ſpeak to; and that is, How the Earth comes to be filled with variety of *Bodies*, abounding with different qualities.

Since I propoſe here to treat of the Original of Qualities, I muſt, of neceſſity ſpeak of the Firſt Matter, and its Formation; and that leads me naturally to conſider the firſt Creation; which I ſhall do as briefly as poſſibly I can.

I ſhall not cite the various Opinions of the ſeveral Sects of Philoſophers that treat of the World's beginning, (tho' ſome

ſome thought it had none,) this would look more like Shew, than Uſe, which I have no Temptation to do, ſince I write for Pleaſure, not for Bread. Beſides, for Philoſophy's ſake, I ſhall omit it; for there is nothing ſo fooliſh, which ſome of them have not ſaid. Nor ſhall I borrow Parts of the Many, as the *Greeks* did, to patch up a New one of my own. Nor ſhall I ſpeak of the Creation any farther than as it relates to my preſent purpoſe. But herein I will take the Philoſopher *Moſes* for my Guide, who, excluſive of his Divine Authority, has given a wiſer Account of the World's Creation, than the whole Body

of Philoſophers put together; whoſe Writings the moſt Learned Biſhop *Stillingfleet* has defended in his *Origines Sacræ*, againſt all the World.

Of the Creation. God having created the Firſt Matter, which ſeems to be a thin, fluid Subſtance, an Abyſs of Fume or Vapour, rather than Water, which was therefore the more paſſive and tenuous, fit to be ſtretched out for the compoſition of Heaven, and capable of any Form; he gave a Form fit to actuate and impregnate this Matter, which was to be the vital Principle of this Body. This general Form was a Spirit of Light and Heat, and ſo are all particular

ticular Forms now, and therefore capable of being the Inſtrument of God, (not the Third (*a*) Perſon in the Trinity) to rarefie and ſubtilize the Superficies of this Abyſs, and to exalt it to the Dignity of conſtituting Celeſtial Bodies and *Æther*.

(*a*) 'Tis an uſual *Hebraiſm* to impute ſecond Cauſes to the firſt. This diſtinction of Firſt and Second Cauſes, was found out firſt by the *Greeks*, who taught the World to ſpeak Scholaſtically; but the *Jews* made them all one; which indeed, in a large ſence they are; for *the world is the Lord's, and all things therein.* And therefore *Iſaiah*, c. 40. v. 8. ſaith, *The Graſs withereth, the Flower fadeth, becauſe the Spirit of the Lord bloweth upon it.* As the World is God's, and all the Spirits in it, and Parts of it, ſo indeed this may be ſaid to be the Spirit of the Lord, in point of Property, but not of Identity. Can any one think that this Spirit that blows on the Graſs, (or take it Metaphorically, for Man,) is the Holy Ghoſt? *Junius* and *Tremellius* tranſlate the Words *Spiritus Jehovæ*, the appropriate Name of the *Eternal*; yet in their Commentary ſay, 'tis not *Regenitus Spiritus Sanctificationis in Chriſto*; which, if they had remembred, they would not have rendred the *Spiritus Dei*, Gen. 1. *Spiritus Sanctus*, *Ter-*

tia illa Perſona Deitatis, à Deo Patre & Filio procedens. But they have, I muſt acknowledge, not a few Commentators on their ſide; though I conceive, the *Jews* never dreamed of ſuch an Interpretation: they might believe it ſome *Vis*, *Potentia*, or *Emanatio Dei*, but not the Divine Nature himſelf, which it is diſhonourable to imagine was *incubans ſuperficiei Aquarum*, brooding over the Waters, as a Hen does over her Eggs. This piece of Mechaniſm may be ſuitable to Man, or ſome created Power; but the Almighty *Fiat* is worthy only of God. But beſides this Conjecture, the Original will bear it; for the Learned ſay that *Ruach* ſignifies not only *Spiritus*, but *Ventus*, *Voluntas*, *Angulus*, *Pars*, & *Plaga*. And therefore *R. Abraham* on this Place, renders it, *Spiritus* (*aut Ventus*) *Dei ſufflabat* (*aut cubabat*) *ſuper faciem Aquarum*; (*i. e.*) ſaith he, *Ventus miſſus à Deo, ad deſiccandum Aquas.*

The Firſt Day.

This Spirit of Light and Heat, whoſe Property is Motion, acting upon this *Superficies*, rais'd it up on all ſides, and mixing and abiding with it, in a plentiful degree, advanced it up to the ſupreme Heaven, and enlightned all that

that Part, by its diffuſion, which we call *Æther*; though the lower part of that mighty Space, the *Atmoſphere*, was but glimmering, in reſpect of the *Æther*; and the Terraqueous Globe, by reaſon of its diſtance, and gloomy Subſtance, was dark. This Diviſion of the Light from the Darkneſs, Holy Writ calls the Firſt Day's Work.

The Second Day.

This will appear more evident by conſidering the Second Day's Work, and that was the making of a *Firmament*, or Expanſion, which was *to divide the Waters from the Waters*, (*i. e.*) the Waters that reſided with the Globe below, not only from the Celeſtial

leſtial Bodies, which were advanc'd above, whoſe material Principle was Water; but even from the lower part of this Aery Region, the Reſidence of Watery Clouds. The manner of which, I conceive was thus by the Will of the moſt High.

This Active Spirit of Light ſurrounding the moiſt Vapour on all ſides, drove it down lower throughout the Aery Region, and thereby compreſs'd this tenuous Matter, into a more cloſe and narrow compaſs, whence it became condenſed into a watery Subſtance. The Vapour thus condenſed into Water, and thus compreſs'd on all ſides, flying from the Fiery Spirit,

Spirit, as from an Enemy, became ſtill more congeal'd, whoſe Centre being the Sediment of the Waters, became Mud or Earth. And this was the Second Day's Work.

This Fiery Spirit, by the Will of God, acting upon the Waters, divided the ſame, ſo that the Waters being rolled off on each ſide, the Mud or Earthy Subſtance appeared, which by the *Medium* of the Form was made dry, and impregnated with virtue ſufficient for the Production of Plants. And this was the Third Day's Operation. The Third Day.

But on the Fourth Day, the Almighty collected and The Fourth Day.

pent

pent in this ſeatter'd Univerſal Form into the Body of the Sun, whoſe Virtue being ſhut up, & comprized in a narrow Compaſs, was capable of a more intenſe Emanation, whence followed a more noble Production.

The Fifth Day. So that on the Fifth Day God created Fiſh and Fowl, by the Union of the Paſſive Matter, Water, and that of the Form.

The Sixth Day. And afterwards, on the Sixth Day, of the Earth God made Beaſts and Reptils (the Matter being groſſer, the Generation was more ſluggiſh,) and then, as the *Colophon* of all, God created that mighty Crea-

Creature *Man*, endowed with a Mind full of Vertue and Holineſs, in reſemblance to the Divine Nature, (not to ſpeak of his Knowledge and Wiſdom,) and made him Lord of all. Were I not here in Publick, I could not forbear a Rapture of Praiſe to the Almighty Builder of the World, for his Bounty and Munificence to Man, in the mighty Priviledges and Endowments of his Nature. *Sed quod palàm non decet, clàm fiat.*

Having here given a ſhort Abridgment of the Creation, I ſhall proceed to ſhew how the Earth comes to be filled with variety of Bodies abounding

bounding with different Qualities. The Conſideration of this, will take in Plants, Minerals, and all Foſſils.

As for Plants, we find them mention'd in the 3d Day's operation, and that they included their own Seeds, according to their ſeveral *Species*: So that from hence it ſeems that all Plants, being created from the beginning, had for their continuance a Seed infuſed, that *might be* the Future Principle of raiſing the like; I ſay, *might be*; for that I conceive, I have already ſhewed, that Plants may be generated of all ſorts, without the ſowing of the Specifick ſeed, by the Power of the Form, and

the

the prediſpoſition which the Solar Influx has previouſly wrought on Paſſive Matter.

But now it remains we give an account how the Earth comes to be altered by the Solar Influx; or in the Words above, how the Earth comes to be filled with variety of Bodies, abounding with different Qualities.

I ſuppoſe the Earth and Waters, in the firſt Creation, had no Qualities but the primary of Cold and Moiſt, and after the Waters were rolled off, and the dry Land appeared, thoſe that then were, were latent in the Plants which God

God created, which were only in the *Superficies*. A weak Light, and a faint Form being ſufficient for the Production of theſe, ſo that the inner parts of the Earth were ſtill ſimple and undetermin'd.

But God having ſhut up this ſcatter'd and wandring Light, on the Fourth Day, into the Body of the Sun, it became thence a powerful and univerſal Form or Spirit to this ſimple or general Matter, which wheeling about this Globe of Earth and Waters continually, and darting into it on all ſides Rays of Light and Heat, muſt of neceſſity fill the Earth with Heat and Spirit.

This

This vital Heat ſtill being multiplied and increaſed by the Influx of more, and this Form moving in its Sphere, by mixing with the Waters, and ariſing by Sublimation with them, what with the Rays flowing in, and the Vapours by ſubliming to the *Superficies* of the Earth, expiring; muſt of neceſſity work on the Paſſive Matter, the Earth, through which they paſs, and according to the Plenty or Scarcity of the Form, cauſe diverſity of Qualities in it; for the warm Vapour ſtill purifies the place where it paſſes; but where it is ſtopp'd, before purification of the Place, an abortive or imperfect Thing is made.

Thus *Mercury* determined to a Metallick *Species*, for want of sufficient Heat in the Matrix, becomes an Abortive. And thus the Earth, wrought upon variously towards the *Superficies*, by the Intension or Remission of the warm Vapour, though in a most minute degree, must produce a different Salt, and thence a different Plant, as the least Stroak of a Pencil makes a different Face.

This will appear more evident, when we consider that the various parts of the world are productive of different and appropriated Plants and Metals, which can be owing to nothing, but the various infor-

information of the Matter, which proceeds from the nearer or remoter acceſs of the Parent of all Forms, the Sun, differenced under the ſame Meridian; as I ſhall ſhew hereafter.

'Tis eaſie to obſerve how Fire alters Matter, though determined, both in Figure and Quality: Thus a Culinary Fire, moderately applied to Fruit, Fleſh, or Plants, by boiling, baking, or roaſting, cauſes a Taſte quite different from what an intenſe Heat, or over-boiling, baking, or roaſting occaſions

Thus the moſt Learned *Metalliniſts* affirm of the Ge-

neration of Metals, that *Saturn* is produc'd of the moiſt Vapour adhering to Places impure and cold; *Venus*, of that Vapour in a Matrix impure and hot; *Sol*, in a Place pure and hot, *&c.* Of theſe Matters, I conceive, *Des Cartes* has ſpoke but meanly; for he makes the diverſity of Metals to ariſe from the different Magnitude and Figure of their three Principles, which is a Notion borrowed of *Epicurus*. But he acknowledges in this Matter his want of Experience; for he tells us, *Quæ fortaſſe ſingula deſcripſiſſem hoc in loco, ſi varia Experimenta, quæ ad certam eorum cognitionem requiruntur, facere hactenus licuiſſet.* 'Theſe Matters (ſaith he,)

'I would have deſcribed par-
'ticularly in this place, if I
'had had an opportunity of
'making ſome Experiments,
'which are neceſſary to the
'exact knowledge of them.
But I believe he had the Philoſopher's Fortune, as well as Wit; ſo that

Haud facile emergunt quorum virtutibus obſtat
Res angusta domi.

'His Vertue's hardly to be
'ſeen
'Whoſe Fortune is but low
'and mean.

'Tis not from the Configuration of the Metalline Principles, that Metals vary, but

by how much the Place is depurated, the Metal becomes more excellent, as I have ſhewed before. Beſides the three imaginary Principles of Metals, were never yet ſeen diſtinctly produced by Nature, and therefore no ſuch various Configuration is productive of various Metals.

The ſame Reaſon holds for all ſorts of Foſſils; ſo that the Terreſtrial Heat, flowing from the Central Parts of the Earth, (which ſome Philoſophers call the Terreſtrial Sun, others the *Archeus* of Nature) and the Celeſtial flowing from the Sun (being both alike,) continually into the Earth, do there meet and unite,

nite, and what from the interpoſition of moiſt Vapours, ariſing from ſome Mariſh Places, that hinders the Solar Influx, from the Inundation of Waters into the Bowels of the Earth, in other places; the compactneſs of the Earth, that repreſſes the aſcending Vapours (*a*), in others; the looſneſs in others, that gives way to it, ariſes all that vaſt variety of Bodies abounding with different Qualities, which we behold by digging in the Earth, and ſee in Plants in the *Superficies*. And this Alteration, that is, Remiſſion or Intenſion of Heat in the Vapour, gives that variety of Form to the Leaves of Plants, ſcarce one Leaf in the ſame

(*a*) I am confirmed the more in this Opinion, by an Iron Mine which I ſaw at *Tunbridge*, whoſe Vein running about three Miles, was ſtopt at a hard Rock; for this Rocky Subſtance hindred the aſcending Vapour.

Plant, being in all parts like another.

This will appear more evident, by conſidering, that the permanent Matter of all Bodies is Salt, and the Form, a Portion of Light. And for the Salt, it is much the ſame in all Bodies, when ſtript of its ſpecificated Qualities; and the Form differs rather in degree than kind in all Bodies, as is apparent to them, who are acquainted with the Analyſis of Bodies.

Concluſion. But after all, I have not the vanity to think, that all that I have ſaid, will obtain with the Reader: The Minds of moſt Men ſtand bent, and inclin'd

inclin'd to the Pedantry of their Profeſſion and Education; not one Man in ten thouſand is other than what he learn'd from his Tutor or Maſter; for though God has given us large and free Faculties, yet we ſuffer our ſelves to be bow'd down to Principles and Notions, without examining them with Freedom and Judgment. This is evident from the Societies of Men, who always follow their Founder through blind and ignorant Zeal.

Againſt this, I cannot but commend *Ariſtotle*, who oppoſed *Plato*, even whilſt he taught him: By which, I only mean, he examined the Food

Food before it went down. But our Palates are ſo vitiated, that we can taſte nothing but what we are uſed to.

Therefore I do not expect that they who have never looked into *Natural Philoſophy*, or have but juſt made an entrance, ſhould imbibe what I have offered; I have not writ to ſuch, having only given Hints, not a Syſtem of Philoſophy.

There are Principles and Elements in all Sciences, that are firſt to be learned; there are ſuch Difficulties in Learning, as well as Knowledge, that what afterwards will appear plain and evident, at firſt ſight,

ſight, ſeems to raw and crude Underſtandings, repugnant and contrary to Truth. 'Tis no wonder therefore that *Pythagoras* taught, That the firſt Buſineſs of Man, was to free the Mind from Pollution and Prejudice, without which Freedom, none can perceive aright. Then the Seeds of Knowledge and Truth are to be inſerted, then the Mind becomes new, has new Appetite, new Paſſions, is dead (almoſt without a Metaphor) to the former Life, and alive to Vertue and Philoſophy. In this Soil the Tares and the Wheat will not grow together: 'For Philoſophy (ſaith *Hierocles*) 'is the Perfection 'of Humane Life, reſtoring

'it

'it to the Divine Reſem-
'blance. Vertue and Truth,
'effect this; the former ſub-
'duing Exceſs of Paſſions,
'the latter inducing the Di-
'vine Form.

The Mind of Man muſt be always filled with ſomewhat; here Nature abhors a *Vacuum*; and the warmer every Man's Conſtitution, the more active his Spirit. So that he who takes no care to fill his Mind with moderate Knowledge of God and his Works, to be able from thence to entertain himſelf with pleaſing Thoughts, will give our great Enemy an opportunity to attack him when idle; with whom to parly, is to be undone. How

How have I known Men loſt, in ſeeking for Game without, meerly for want of a good Stock within! Wherefore there is no Treaſure like that of the Mind.

But you will ſay, May not a Man's Buſineſs, and the Affairs of the World entertain him? Nature requires a Relax of Drudgery; The Vacation-Moments undo Mankind; not knowing how, wiſely to fill up thoſe Spaces, runs us into Miſeries, hardly to be retrieved. 'But a Mind 'filled with Knowledge and 'Vertue, is a Fountain of E-'ternal Light, has Commu-'nication night and day with 'Heaven, and has Raptures of 'pleaſure,

'Pleaſure, which this lower
'World knows nothing of.

Here the crafty Politician is at a loſs; here the greedy Merchant hath no Commerce; here the ſubtil Caſuiſt is puzled; the Voluptuous, the Ambitious, the Covetous, the Laſcivious, the Dull, the Sowre, and the Baſe, of theſe things have no Guſt or Reliſh: To theſe I may ſay, as the Herald us'd to do at the Pagan Sacrifices; *Procul eſte Profani.* For the Wiſe and the Humble, the Modeſt and the Vertuous move only in this elevated Sphere. But Morals are needleſs after what the Excellent Dr. *Lucas* has ſaid, in his admirable

mirable Works, who has obliged an ungrateful Age.

If what I have ſaid, take with the few Wiſe and Vertuous, I have my End; as for the Diſſolute, may he reform; but as Vicious, I neither court his Suffrage, nor value his Judgment. ——*Quid mali feci?* &c.

Sempiterna Lux! Nec Honores nec Divitias peto, me modò Divinæ Lucis Radio illumines, & Sapientiâ, Rerumq; Naturalium Cognitione inſtruas, ut hiſce à me probè perſpectis, Majeſtatem tuam, earum meiq; Creatricem intenſiore Amore & Ardore Animi proſequar & adorem, ut cum mei tranſierint Dies, (Cœleſti Regno

tuo

tuo illatus,) comparatior sim, ad Divina contemplanda, Sapientiamq; tuam Amore Seraphico amplexandam.

MVSEVM BRITANNICVM

FINIS.